South Carolina Energy Office

Guide to Energy Performance Contracting

Prepared by:

SOUTH CAROLINA ENERGY OFFICE

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Glossary

End-Use	A general category of energy use within buildings; for example, lighting, space cooling, water heating, etc.
Energy Baseline	A calculation of each type of energy that would have been consumed in existing facilities if the contractor had not installed energy efficiency measures. The baseline is used in the measurement of energy savings from the project.
Energy Efficiency Measure (EEM)	The installation of new equipment, modification of existing equipment, or revised operations or maintenance procedures to reduce energy costs by improving efficiency of use.
Energy Performance Contract	An agreement for the provision of energy services and equipment, including but not limited to building energy conservation enhancing retrofits and alternate energy technologies. A partnership in which a private company agrees to finance, design, construct, install, maintain, operate, or manage energy systems or equipment to improve the energy efficiency of, or produce energy in connection with, a facility in exchange for a portion of energy cost savings, lease payments, or specified revenues. The level of payments is made contingent upon the measured energy cost savings or energy production.
Energy Service Company (ESCO)	A private company providing energy management equipment and services including feasibility studies, design, installation, maintenance, and financing.
Governmental Lease	A contract granting use of property during a specified period in exchange for a specified rent. When a public agency is the user of the property, the income from the lease is exempt from income taxes. These tax savings are passed on to the agency through a reduced interest rate.
Guaranteed Savings	A performance contract under which the facility pays a lump sum price (usually in monthly installments) for the energy-saving improvements. The ESCO guarantees energy cost savings will equal or exceed this payment.

Request for Proposals (RFP)	A selection process designed to qualify an ESCO to develop an engineering study (aka: Energy Study) that supports and reconciles the ESCO's energy savings proposal.
Request for Qualifications (RFQ)	A selection process designed to pre-qualify ESCOs to provide an energy savings proposal for a specified facility.
Shared Savings	A performance contract in which the facility and ESCO agree to share the measured energy savings on a pre-determined basis. Under a shared savings contract, the agreement to share savings may be for a fixed time period or until a fixed amount has been paid.
Simple Pay-Back or Pay-Back Period	A measure of project economic effectiveness. The pay-back period is calculated by dividing the initial project cost by the annual project savings. It is the period required for the cost savings to equal the cost of implementing the project.

I. INTRODUCTION

1. INTRODUCTION

1.1 About This Guide

The South Carolina Energy Office (SCEO) of the South Carolina Budget and Control Board (BCB), Division of Regional Development, has prepared this Guide to help local governments and school districts (Facility Owners) improve their buildings by using the money saved from reduced energy costs to pay for energy efficiency improvements. A part of what is normally paid to the utility company is saved, and this savings is used to pay for more energy efficient equipment, controls, maintenance, etc. "Energy Performance Contracting" (aka: Performance Contracting), as this approach is commonly known, provides a Facility Owner with a way to fund energy-saving improvements even when budgets are tight.

In this Guide, SCEO provides an introduction to Energy Performance Contracting and a reference manual to help local governments and school districts through the process. Chapter 1 introduces the common features of Performance Contracting. Chapter 2 describes a simple, preliminary feasibility evaluation, and provides advice on getting a project started. Chapter 3 describes in detail the Energy Service Company (ESCO) selection process. Chapter 4 provides a description of the actual performance contract. Chapter 5 addresses in detail the measurement of energy savings and gives advice on project monitoring and management to ensure a successful project.

1.2 What Is Energy Performance Contracting?

Energy Performance Contracting is a method for purchasing energy-saving improvements in buildings. Many local governments and school districts face increasing energy costs and the need to replace worn-out equipment, but lack the funds to make building improvements. Energy Performance Contracting has three distinguishing features that address this and other common problems:

1. A single procurement is used to purchase a complete package of services in which one contractor (ESCO) is accountable for design, purchase, installation, maintenance, and operation of the equipment to ensure optimum performance;

2. The package of services includes financing of all the project costs, so *no up-front money is needed*; and,

3. An energy performance contract is structured so that payments to the ESCO are contingent upon the actual or stipulated level of savings achieved (or energy reduced). In theory, the savings produced by the project are greater than its cost. As such, a performance contract pays for itself. Since payments to the ESCO are contingent on the savings achieved, it is in the contractor's interest to maximize the energy savings. This translates into increased dollar savings for Facility Owners.

1.3 How Is Energy Performance Contracting Different?

1.3.1 Conventional Contracting

A conventional process to purchase energy efficiency improvements often requires four separate solicitations and contract awards. First, a Facility Owner solicits engineering services for an energy study. After reviewing the completed study, the Facility Owner selects the improvements to be implemented and solicits proposals for engineering design services. Once the designer completes a plan and specifications, the Facility Owner issues one or more invitations to bid to select contractors who will install the improvements. Finally, the Facility Owner invites bids to request preventive maintenance services for any equipment the facility is not maintaining with in-house staff.

1.3.2 Energy Performance Contracting

Energy performance contracts replace the conventional collection of solicitations and contracts with a single proposal covering all aspects of the project and one contract with the selected proposer. The process begins with an evaluation of a facility's potential for efficiency improvements conducted by the Facility Owner staff. If the potential seems promising, the Facility Owner prepares a Request for Qualifications (RFQ). The RFQ's purpose is to select at least two Energy Service Companies (ESCOs) to prepare proposals for the provision of energy efficiency equipment and services to the Facility Owner in response to a Request for Proposal (RFP). After receipt of a favorable proposal, the Facility Owner directs the winning ESCO to develop a comprehensive Energy Study[1] of energy efficiency opportunities at the facility. Said proposal becomes the basis for the contract between the Facility Owner and the ESCO. The contract specifically addresses compensation, liability, the accountability of services, and the ESCO's guaranty of savings at the facility.

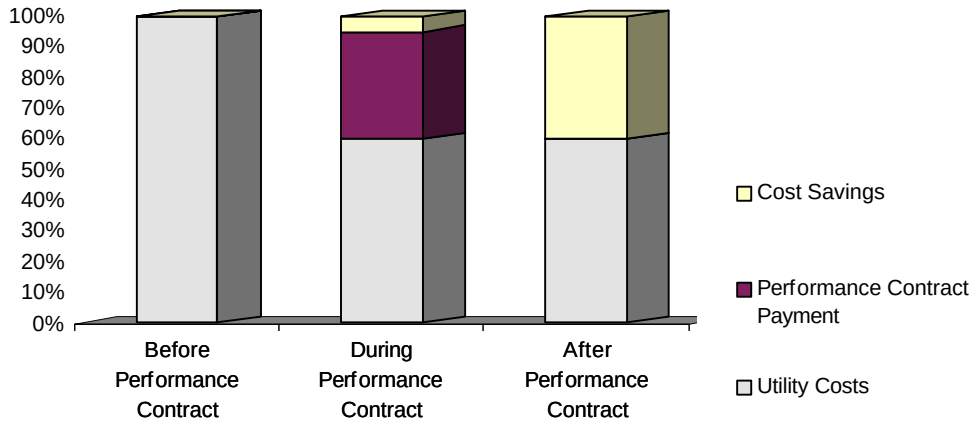
After receiving the notice to proceed, the contractor furnishes, installs, and commissions the efficiency improvements and begins performing maintenance and repairs that continue for the duration of the contract term. Facility Owner staff monitors the ESCO's day-to-day performance during the construction process in the same manner they would monitor a large repair and maintenance project. After construction is completed and accepted, Facility Owner staff monitor ESCO performance concerning equipment maintenance and repair, standards of service and comfort, and level of energy savings achieved.

[1] The cost of the Energy Study is included in the work financed by the ESCO. If the Facility Owner chooses not to use the ESCO to complete the project, the Facility Owner shall reimburse the ESCO for the preparation of the Energy Study.

1.4 Benefits of Energy Performance Contracting

Energy Performance Contracting may offer Facility Owners several benefits. First, it allows Facility Owners to proceed with projects that tight budgets may otherwise prevent. The ESCO finances all of the project costs, including up-front engineering, construction, and maintenance services, allowing projects to proceed without capital improvement or repair funds. The Facility Owner receives new and improved lighting, cooling, and other equipment and the cost of this equipment is either fully or partially offset by reduced utility bills. After the equipment cost has been paid off, the Facility Owner owns the equipment and retains all of the savings from reduced utility bills. Even if the payments to the ESCO offset much of the energy savings in the short run, upgrading equipment allows all of the non-energy benefits, such as improved comfort and reliability, to be realized immediately.

Figure 1-1: Energy Performance Contract Cost Savings



Energy Performance Contracting streamlines the purchasing process for energy efficiency projects, reducing the cost and time required to bring energy-saving projects on line. A single company takes responsibility for designing, building, financing, and maintaining all necessary improvements. The ESCO often employs a team of consultants and subcontractors to accomplish this but one company is still accountable for the ultimate success of the project. This single-source accountability often makes the project easier to manage than a conventional construction project. Streamlining the procurement process in this way makes it possible for Facility Owners to implement more comprehensive projects, reduces the time and cost to manage projects, and gives on-site Facility Owner staff and users the opportunity for more input into the project design and better control of the final product. As a result, efficiency improvements acquired through performance contracts often work better, last longer, and enjoy stronger long-term support from Facility Owner administrators, maintenance staff, and building users than other energy efficiency projects.

Energy Performance Contracting, as its name implies, with proper contractual language, shifts much of the risk associated with an energy efficiency project from the Facility Owner to the ESCO.

1.5 Pitfalls of Energy Performance Contracting

The pitfalls of implementing an Energy Performance Contract are also well documented. Although the concept and process are proven, some ESCOs have taken advantage of Facility Owners by failing to explain or inform them of the key technical and financial decisions that need to be made by the Facility Owner. Instead, in such cases, the ESCO made the decision without Facility Owner involvement and simply crafted the performance contract to favor the company and not the Facility Owner. A summary of major pitfalls follow:

- Energy Baseline Development

  It is crucial that the Facility Owner participate in establishing the energy baseline, as defined in Section 5.1, instead of the ESCO establishing the baseline on its own.

- Energy Baseline Adjustment

  It is also important that the Facility Owner agree on the definitions and methodology for making any future adjustments to the energy baseline. The Facility Owner can include a provision that requires third party opinions on adjustments.

- Operational Savings

  Operational savings include those savings that are not energy. They can be labor or material savings that result from the implementation of a particular energy conservation measure. For instance, if a school has new lights installed in all classrooms, no labor or materials will be necessary in these areas for changing out lamps or ballasts for a fairly well defined time period. Any claimed operational savings should be carefully examined and verified by the Facility Owner before agreements are signed. In some cases (such as the case with labor savings) the savings may never actually be realized and will not show up in the budget (i.e. you don't save labor unless a position is eliminated).

- Cost Avoidance

  This term applies to implementing measures that will allow Facility Owners to avoid future costs, but does not save hard dollars compared to past budgets. For instance, if a school knows that it needs to replace a boiler within the next ten years, it will need to appropriate capital dollars to do so. However, if the school installs a boiler under the performance contract today, it will avoid spending the future capital outlay on the boiler. Facility Owners need to be careful! When ESCOs propose the inclusion of cost avoidance in calculating savings, Facility

Owners are actually spending the money today and must budget for the lease payment each of the next years. Facility Owners should not include these so called savings in their calculations unless they have a stream of future capital dollars that can be earmarked toward the project.

- Excessive Finance Charges

  There have been instances where ESCOs inflated the interest rate on the funds borrowed to generate additional profits. Facility Owners should check the rates against local banks or other national institutions to make sure they are competitive. Facility Owners may be able to arrange their own financing at lower rates.

- Required Maintenance Agreements

  Some ESCOs have required that the preventive maintenance on a facility(ies) also be outsourced to that ESCO. As such, they tie the maintenance agreement to the guarantee agreement. Facility Owners need to be careful! Typically, these maintenance agreements are very expensive in relation to the value provided. Often, the argument for the maintenance agreements by the ESCOs is that if the maintenance is not performed by their staff, they cannot assure that the guaranteed savings will occur. Not all ESCOs agree with this position. In many cases, there are ESCOs willing to guarantee savings while providing training for maintenance staff so they can handle maintenance requirements. In general, Facility Owner maintenance staff can provide better value than any third party except in highly specialized cases.

- Lack of Local Facilities Control

  There have been abuses in the performance contracting business where ESCOs have required that any after hours building usage changes must be telephoned to offices in far away cities for the ESCO to program. These inconveniences should not be tolerated and Facility Owners should carefully study the terms and conditions of the performance contract with their attorneys' help. Not all ESCOs agree with this position. There are many ESCOs willing to guarantee the savings while providing local control for Facility Owner maintenance staff. The objective of the performance contract should be to increase comfort and control and not manage the facilities.

- Terms of Savings Reconciliation Versus Budget Cycle

  Several standard ESCO performance contracts are written to allow the ESCO to carry over savings that occur in early years to offset losses in later years. No Facility Owner should allow these terms. Once the excess savings occur (excess is everything over the guaranteed amount of savings), the Facility Owner should be free to use these savings in the current fiscal year. All savings should be reconciled on an annual basis and should stand alone on that basis.

- Quality Control

  Some performance contracts have been poorly defined. When this occurs, the Facility Owner may see less or lower quality products. Before entering into any contract, Facility Owners should require the ESCO to provide a detailed definition of both products and services being proposed and have both the proposed services and the products reviewed by someone knowledgeable from either the Project Team (Section 2.4) or an engineering consultant.

- Excessive Guarantee Costs

  In some cases, the risk of failure to meet savings projections does not warrant or justify the cost of the guarantee. For example, if it costs $10,000 to guarantee a particular energy conservation measure that saves $20,000, it might be better to put $10,000 in the bank and hope that the ESCO did not miscalculate the savings by 50%. Most projects do not miss the projected savings by a significant percentage.

- Cream Skimming

  Sometimes, ESCOs specialize in or promote energy savings projects with fast payback measures. These provide immediate returns to the Facility Owners but "skim the cream" and prevent other opportunities of achieving energy savings from occurring. For example, if a performance contract focuses only on lighting, a measure with a short payback period, this may eliminate the opportunity to achieve savings through combining lighting with longer term payback items. By bundling several types of measures together, the quick payback items are leveraged to pay for longer term payback items.

1.6 What Kinds of Equipment and Services Can Be Purchased?

Energy-savings performance contracts are used to purchase a wide variety of building equipment and services. Energy-efficient lighting, air conditioning systems, energy management control systems, motor replacements, and variable-speed drives for pumps and fans are commonly implemented improvements. Generally, an ESCO will include any improvement expected to recover its own cost (including maintenance and interest expense) in energy savings over the term of the agreement. This means that longer payback items, such as adding ceiling insulation or replacing windows, usually do not qualify unless they are bundled with fast payback items.

In addition to equipment installation, the ESCO may propose various repair and maintenance services. Often ESCOs propose repairs to existing systems, such as re-installation of damaged or missing controls or repair of leaks in chilled water piping. Generally the ESCO assumes responsibility for preventive maintenance and repairs to all new equipment installed. Also, as noted earlier, the ESCO may offer to take responsibility for maintenance and even operation of existing equipment. For example,

the ESCO may offer to provide remote monitoring and adjustment of temperature setpoints with a computerized temperature control system.

Because any installed equipment is ultimately owned by the Facility Owner, the ESCO should always provide documentation for all installed equipment, including as-built drawings and operating manuals. The ESCO should train the on-site Facility Owner staff to operate and maintain the equipment. In some cases, ESCOs budget for Facility Owner personnel to attend training programs provided by equipment manufacturers.

1.7 Energy Performance Contracting in South Carolina

Energy Performance Contracting is relatively new in South Carolina although state agencies, local governments and school districts throughout North America have used it for over 15 years, funding hundreds of millions of dollars worth of energy savings. Many other states and the federal government actively promote energy performance contracting to improve energy efficiency.

The South Carolina Energy Conservation and Efficiency Act of 1992 authorizes the use of guaranteed energy savings contracts (a type of performance contract) by governmental units. A key provision is that the contract must include a written guarantee that savings will meet or exceed the cost of energy conservation measures. Refer to South Carolina Code of Laws, Section 48-52-670, for the complete provisions.

Guaranteed energy savings contracts are also referenced in South Carolina Code of Laws, Section 11-27-110, concerning the constitutional debt limit of governmental units. Payments on these contracts are exempted from some of the debt limit provisions that apply to other types of financing agreements.

It is important to understand that local governments and school districts have specific procurement and administrative rules and regulations they must follow. For instance, energy efficiency measures installed at school districts under an energy performance contract must be approved by the Office of District Facilities Management (ODFM), South Carolina Department of Education, prior to the installation. Further, any vendor that has executed an energy performance contract with a school district for heating, ventilating, or air conditioning system modifications or replacements, replacement or modification of lighting and/or electrical systems, energy recovery systems, and/or measures that are affected by any applicable codes, shall submit complete drawings and specifications. These documents must include the professional seal of an Architect and/or Engineer licensed to practice in South Carolina. This same licensed professional shall notify ODFM of the installation of the aforementioned efficiency measures to give ODFM the option to inspect the installed measures in the field. School districts must also make certain the lighting levels required by the *South Carolina School Facilities Planning and Construction Guide* are met.

Finally, while the Guide will prove informative for facility managers at state agencies, all state agencies must follow the *Manual for Planning and Execution of State Permanent Improvements, Part II* issued by the State Engineers Office.

II. PRELIMINARY WORK

2. PRELIMINARY WORK

Facility Owners usually consider Energy Performance Contracting because they have an immediate problem but lack funds to solve it. Often the problem is simply that utility costs are rising faster than budgets. Sometimes the problem is that existing equipment is worn out and needs to be replaced but replacement funds are not available.

Before initiating an energy performance contract, Facility Owner staff should evaluate whether it is likely to solve their problems. A feasibility evaluation can be as simple or sophisticated as a person or institution wants to make it. This section outlines a simple, preliminary method based on common rules of thumb. Section 2.2 and Appendix A, Feasibility Analysis, describe a more sophisticated method, including available software tools.

2.1 A Preliminary Feasibility Analysis

To determine the feasibility of an energy performance contract, a general rule of thumb is that a facility should have energy-saving opportunities which meet the following two conditions:

- The energy-saving opportunities should add up to a project investment of at least $50,000; and
- The opportunities should have a simple pay-back period of five years or less for equipment. (This excludes such items as financing and ESCO fees)

If an Energy Study has already identified a project meeting these criteria, no further evaluation is necessary. Table 2-1 can be used to evaluate feasibility based on readily available information and rules of thumb developed within the Performance Contracting industry. Facility Owners who want to perform a more sophisticated analysis should refer to Appendix A, Feasibility Analysis.

Table 2-1: Performance Contracting Feasibility

	Yes	No
1. Does your facility spend less than $100,000 a year on energy?		
2. Has a large-scale lighting efficiency upgrade *already been completed* in your facility?		
3. Is a significant part (more than 20%) of your facility scheduled for closure or major remodeling within the next five years?		
4. Has a recent energy audit of your facility failed to identify any significant energy-saving opportunities?		

If you answered YES to any of these questions, your facility may not be a good candidate for Performance Contracting. In this case, several options are available.

If you answered YES to question number 1 (energy costs are less than $100,000 per year) consider combining several facilities to make a larger project. If you answered YES to question numbers 2, 3, or 4, consider contacting potential qualifiers directly, describe your facility, and ask whether they would submit qualifications if an RFQ is issued. You may also wish to contact the SCEO for assistance.

2.2 In-depth Feasibility Analysis

Performance contracts, like other large construction projects, require the support and participation of many people for successful completion. A more sophisticated evaluation helps to provide insight on the project, and as a result, win invaluable support from maintenance staff, administrators, and building users. In addition, knowledge gained during a careful energy analysis can strengthen the facility's position in future discussions with potential qualifiers.

Performing an in-depth analysis of existing conditions and energy-saving opportunities at the facility offers the following benefits:

- Low- and no-cost energy saving opportunities are often discovered which can be implemented immediately;
- Facility Owner staff will have a better understanding of existing conditions and be better prepared to negotiate the energy savings baseline;
- Facility Owner staff will be better prepared to suggest possible energy-saving improvements to potential qualifiers; and
- Facility Owner staff will be better prepared to evaluate proposed efficiency measures, technical approaches, and costs.

Due to the specialized technical expertise required for an in-depth study of cooling efficiency improvements, most facilities focus their attention on lighting energy savings first. Software for lighting efficiency analysis is available that makes sophisticated analysis of lighting opportunities relatively easy. Appendix A provides further directions for an in-depth feasibility analysis, including information on software tools.

2.3 Cream Skimming

Sometimes, promoters of energy savings projects are interested only in the fastest payback measures. These provide immediate returns to the Facility Owners but "skim the cream" and prevent other opportunities of achieving energy savings from occurring. For example, if a performance contract focuses only on lighting, a measure with a short payback period, this may eliminate the opportunity to achieve savings through combining lighting with longer term payback items. By bundling

several types of measures together, the quick payback items are leveraged to pay for longer term payback items.

Another type of "cream skimming" may occur when utility rebates are used to install quick payback measures, such as lighting, skimming savings off the top and thus removing the opportunity to utilize more comprehensive performance contracts to maximize savings. The longer payback measures eliminated may never be implemented.

2.4 Organize a Project Team

Managing an energy performance contract requires the participation of experts from several departments, including facilities planning, procurement, budget and finance, and legal. To meet this need, the SCEO recommends the formation of a Project Team early in the process. The Project Team will need diverse kinds of expertise, including:

- Technical expertise to evaluate energy efficiency potential, develop a scope of work, evaluate ESCO Statement of Qualifications, evaluate Proposals, and evaluate the Energy Study;
- Procurement expertise to ensure the process follows applicable procurement rules during the Request for Qualifications, Request for Proposals and contract award;
- Knowledge of budget and finance procedures to establish a method to budget and make payments for the duration of the contract[2]; and
- Legal expertise to review all contract terms and assist in discussions with the proposer before contract award.

To organize a Project Team, first identify a Project Manager who will have overall responsibility for coordinating the team members and overseeing the work performed by the ESCO. Most Facility Owners choose their Director of Administrative Services to be the Project Manager.

The Project Manager should recruit people who have expertise in each of the areas listed above early in the development of the project. During the early stages of the project, it may be appropriate to simply provide team members with general information about Energy Performance Contracting and the project status. Holding an introductory briefing and providing copies of this Guide to all team members makes a good beginning. The purpose of this introductory meeting is to:

- Explain the concept of Energy Performance Contracting to all Project Team members;

[2] One important issue to discuss and resolve is how to establish a mechanism for continuing to make utility and performance contract payments. Utility payments will decrease with a performance contract and the savings need to be retained, from a budgeting standpoint, to meet obligations under the performance contract.

- Build support for the project by describing facility needs the energy performance contract will meet and the benefits expected to result from the project; and
- Describe the process and the intended schedule for each step so the team members know what to expect.

Several of these Project Team members may be logical choices for an Evaluation Committee when the project reaches the point of ESCO selection. Table 2-2 outlines roles for representatives of the different areas of expertise during each phase of the project.

Table 2-2: Roles of Project Team Members

	Facilities Planning & Management	Procurement	Budget	Legal
Evaluate Project Feasibility	X	*	*	*
Prepare RFQ/ RFP	I	X	*	I
Select ESCO (incl. Discussions w/ESCOs)	I	X	I	I
Manage ESCO Performance	X	*	*	*

Key: X - Lead responsibility I - Provide input * - Keep informed

2.5 Win Management Support

Winning management support is another activity that must begin as early as possible in the Performance Contracting process. In order to win support, Facility Owner staff will need to persuade key administrators of the value of Performance Contracting. In addition to explaining how an energy performance contract works, questions that Facility Owner staff can answer to help win support include:

- What facility needs will a performance contract meet? Needs might include replacing worn-out equipment, reducing energy costs, or improving comfort;
- Is it likely that improvements will be made without an energy performance contract? What funds will be used?
- Could these funds be used for other projects?

Many public officials work hard to win the support of facility users as well as managers. Educating facility users about a project's benefits makes them more willing to cooperate during the installation process and means fewer headaches for administrators and facility personnel.

2.6 Gather Facility Information

For Facility Owners that have not already done it as part of their feasibility analysis, another step in getting started is to gather information about their facility(ies). As a minimum, Facility Owners will need to collect the information outlined in Appendix B in order to prepare the RFP.

III. SELECTION PROCESS

III. SELECTION PROCESS

3.1 Purpose and Scope of Request for Qualifications (RFQ)/Request for Proposals (RFP)

The purpose of the RFQ is for the Facility Owner to select at least two Energy Service Companies (ESCOs) to prepare Performance Contracting Proposals for the provision of energy efficiency equipment and services at the facility. After receipt of a favorable Proposal, the Facility Owner directs the winning ESCO to develop a comprehensive Energy Study of energy efficiency opportunities at the facility. The Energy Study becomes the basis for the contract between the Facility Owner and the ESCO. Under the contract the selected ESCO will:

1. Provide comprehensive energy services for the facility (listed in Appendix B), including the: (a) design, selection and installation of energy efficient equipment and systems; (b) maintenance and servicing of the installed measures; (c) securing of financing for the transaction; and, (d) energy management training of selected Facility Owner's employees.

2. Structure the terms of the Facility Owner's payment obligations for equipment and services on a Performance Contracting basis. Under a performance contract: (a) the ESCO will guarantee that equipment and services will achieve a predicted level of energy and operational savings; (b) the Facility Owner will receive equipment and services without the requirement of capital funding; and, (c) the Facility Owner will be able to meet its payment obligations (or a predetermined percentage of payment obligations) through guaranteed energy and operational savings.

3.1.1 RFQ/RFP Selection Process

Appendix C provides a sample RFQ/RFP for the Facility Owner. Steps in the sample RFQ/RFP selection process are described below.

1. The Facility Owner issues the RFQ (Appendix C1) to prospective ESCOs on (date: _____ and time: _____).

2. The Facility Owner must receive a transmittal letter and the requested number of copies of a Statement of Qualifications from a responding ESCO on or before (*date, time*). The Facility Owner's Procurement Representative will distribute the copies to the Evaluation Committee for review and scoring. The Evaluation Committee will be appointed by the Project Team. The Facility Owner's Project Manager may also provide copies to an outside consultant for review and analysis.

3. Each member of the Evaluation Committee will independently reach a cumulative score for a Statement of Qualifications by assigning scores to individual sections according to established criteria, and adding the section scores. Each Committee member will then independently rank responding ESCOs according to the scores of the Statement of Qualifications. The ESCO with the highest score will rank first, the ESCO with the second highest will rank second, and so on. The Evaluation Committee will recommend at least the top two ESCOs submitting Statements of Qualifications ranked in such order by a majority vote of the members.

4. Based on its scoring and ranking, the Evaluation Committee recommends at least two ESCOs to the Facility Owner. If the Facility Owner approves the Evaluation Committee recommendation, it will instruct each selected ESCO to prepare a Proposal by issuing each ESCO an RFP (Appendix C2). Upon issuing these RFPs, the Facility Owner's Project Manager will immediately meet with representatives of the selected ESCOs to review Facility Owner needs, Proposal Specifications, and the timetable.

5. The ESCOs will prepare their Proposals utilizing the format specified in the RFP within a Facility Owner designated timeframe of the date of the RFP. Upon receipt of the Proposal, the Facility Owner's Project Manager will arrange a presentation by the ESCOs to the Evaluation Committee. The Evaluation Committee will begin reviewing the Proposals following the presentation. Each member of the Evaluation Committee will independently reach a cumulative score for the submitted Proposal by assigning scores to individual sections according to established criteria and adding the section scores. Each Committee member will then independently rank the Proposal. The ESCO with the highest score will rank first, the ESCO with the second highest will rank second, and so on. Upon preliminary review, the Committee will: (a) recommend Facility Owner acceptance of the top proposer; or, (b) instruct the Facility Owner's Project Manager to negotiate specific Proposal points with the top proposer.

6. If instructed by the Evaluation Committee, the Facility Owner's Project Manager will negotiate Proposal points with the ESCO. Upon completion of negotiations, the Evaluation Committee will recommend that the Facility Owner either accept or reject the ESCO Proposal. The Committee will make its recommendation within a Facility Owner designated timeframe of the ESCO's original presentation of the Proposal.

7. A representative of the Evaluation Committee will present the Committee's recommendation to the Facility Owner. At the Facility Owner's discretion, it may request the ESCO to formally present the Proposal at that time. After hearing the Committee's recommendation, the Facility Owner may then: (a)

accept the Proposal and issue a Letter of Commitment (Appendix C2; Attachment A) to the ESCO; (b) reject the Proposal and instruct the Evaluation Committee to negotiate with the next highest ranked ESCO that submitted a Proposal; or, (c) instruct the Committee to continue negotiations with the ESCO. If the Facility Owner decides to continue negotiations, whether with the top proposer or with another ESCO, the process will go to Section 3.1.1 Part 5.

8. Within a recommended timeframe of 90 days of the date of the Letter of Commitment, the ESCO will develop an Energy Study (aka: Engineering Study; Appendix C2, Attachment B) that includes final project costs and savings guarantees, final financial arrangements, and contractual documents. The ESCO will submit the Energy Study to the Evaluation Committee as a supporting document for its Proposal. The Committee will recommend that the Facility Owner accept the Energy Study and enter into a performance contract with the ESCO, unless: (a) the total project cost (the cumulative cost for equipment, maintenance and training) in the Energy Study is greater than 110 percent of the corresponding total project cost submitted in the ESCO's Proposal; (b) the total guaranteed energy and operational savings in the Energy Study are less than 85 percent of the savings projected by the ESCO in its Proposal; (c) the Energy Study does not show a cashflow that allows the Facility Owner to meet payment obligations (or a predetermined percentage of payment obligations) through guaranteed savings; (d) the ESCO has made changes in contractual provisions since the Letter of Commitment that were not authorized by the Facility Owner; (e) The ESCO's Energy Study does not comply with the terms of the RFP; or, (f) The ESCO's Energy Study does not follow the prescribed format as outlined in Appendix C2, Attachment B.

9. Upon the recommendation of the Evaluation Committee, the Facility Owner will either accept the ESCO's Proposal and authorize a performance contract (See Sample Contract, Appendix C2, Attachment C) between the Facility Owner and the ESCO, or reject the Proposal. If the Facility Owner rejects the Proposal for reasons other than those stated in Section 3.1.1 Part 8 (a-f) above, the Facility Owner will reimburse the ESCO for the cost of the Energy Study. All costs must be documented and in accordance with the ESCO's Proposal as accepted by the Facility Owner. The Energy Study will become the property of the Facility Owner to use as it sees fit.

3.2 Statement of Qualifications Preparation

A suggested number of pages for a Statement of Qualifications is fifty. It should be divided into three sections and an appendix. Each section should be titled and presented in the following prescribed order:

I. Qualifications

(1) ESCO qualifications, suggested ten pages; and,
(2) staff qualifications, suggested ten pages.

II. Experience

(1) ESCO experience with similar projects, suggested ten pages.

III. Ability to Perform

(1) project management, suggested ten pages;
(2) project responsiveness, suggested five pages; and,
(3) training responsiveness, suggested five pages.

The appendix should contain the responding ESCO's annual report and financial statement for the most recent year. The annual report and financial statement is the only information that does not contain a suggested number of pages, and the only supplemental material that should be accepted. Any Statement of Qualifications that does not meet the prescribed format should be rejected by the Facility Owner.

3.2.1 Transmittal Letter

A letter of transmittal should accompany the requested number of copies of an ESCO's Statement of Qualifications. The letter should state that the ESCO, if selected by the Facility Owner, agrees to prepare a Proposal in accordance with the requirements stated in the RFP (Appendix C2) and Section 3.3 of this Guide. The letter should be signed by an official with the authority to contractually bind the ESCO.

3.2.2 Scoring

A Statement of Qualifications has a total value of 100 points. Each Statement section has the following point value: (1) ESCO qualifications (including annual report and financial statements), twenty five points; (2) staff qualifications, ten points; (3) ESCO experience, thirty-five points; (4) project management, ten points; (5) project responsiveness, ten points; and, (6) training responsiveness, ten points.

3.2.3 Requested Information and Evaluation Criteria

The Facility Owner should request that ESCOs include the following information in their Statements of Qualifications. Information should be presented in a concise manner and respond directly to the specific section.

1. ESCO Qualifications *(10 pages, 25 point value*). Describe the ESCO's: (a) corporate capabilities in energy management and Performance Contracting; (b) number of years the ESCO has been involved in delivering energy efficiency equipment and services; (c) the number and dollar value of performance contracts; (d) range of energy management services offered; and, (e) the financial condition of the firm. Please include a copy of the ESCO's most recent annual report and financial statement in the appendix.

2. Staff Qualifications (*10 pages, 10 point value*). For purposes of responding to this section, consider this Performance Contracting project as having three phases: Phase I, Development, which includes conducting surveys, arranging financing, securing sub-contractors (if needed), and preparing the Proposal; Phase II, Project Installation, which includes installing and commissioning equipment; and Phase III, Operations, which includes reviewing energy consumption, identifying operational needs, and responding to problems.

   For each phase, identify one or two people who will have a direct, hands-on role in delivering energy efficiency equipment and services. In addition, identify one person who will have primary responsibility for coordinating the project through all phases and ensuring that the ESCO meets its responsibilities to the Facility Owner under a performance contract. For each person (maximum seven), please state as concisely as possible: (a) his/her name, position, years with the ESCO, years in energy management, relevant education and training, and related licenses; (b) the tasks that the person will perform for the project and the percentage of his/her time the person will spend on the project during that specific phase; and, (c) a list of up to five energy management projects where the person has performed similar tasks.

3. ESCO Experience (*10 pages, 35 points*). Provide a brief description of five ESCO projects in school, university or other institutional buildings. The projects should demonstrate the ESCO's experience in providing equipment and services similar to what the Facility Owner is requesting. The projects should be within a recommended 400 mile radius of ********, South Carolina. The projects must have been installed and operating for at least one year. At least one of the projects must have been provided on a Performance Contracting basis. For each project, state: (a) client name and address, contact person name and telephone number; (b) project name and total cost; (c) project description, including number and size of buildings, equipment installed, and services provided; (d) annual energy savings resulting from the

project, in terms of total dollars, cents per square foot, and percentage; and, (e) sources and levels of operational savings.

4. Project Management *(10 pages, 10 points).* Describe, step-by-step, the process the ESCO will use to implement the Performance Contracting project, from surveys and Proposal preparation through installation, operation and maintenance. The description should be clear, concise and follow a logical sequence; i.e. Step 1 (brief activity description), Step 2 (brief activity description),.....Step N (brief activity description). In the step-by-step description, include information on the line of communication within the ESCO management structure, and between the ESCO and the Facility Owner. Also, within the step-by-step process, note the procedures for identifying problems, assuring quality, and maintaining the implementation schedule.

5. Project Responsiveness (*5 pages, 10 points*). Describe, in specific terms: (a) how the ESCO will identify and correct operations and maintenance problems over the course of the performance contract; and, (b) how the ESCO will respond to equipment failures or other emergencies. This description will be strengthened by specific, verifiable examples of how the ESCO has responded to problems and emergencies in the **********, South Carolina area.

6. Training Responsiveness (*5 pages, 10 points*). Describe, in specific terms: (a) how the ESCO will determine the training needs for a Facility Owner's maintenance department; and, (b) how the ESCO can provide training, both on-site and off-site, to maintenance staff. The description will be strengthened by specific, verifiable examples of how the ESCO has trained maintenance personnel with similar Facility Owners and other organizations in the **********, South Carolina area.

3.3 Proposal Preparation

Selected ESCOs should prepare Proposals that meet the prescribed format and other stated requirements (Appendix C2). The Proposals should present required

information in the appropriate section in a clear, concise manner. Proposals that do not adhere to the prescribed format and requirements should result in ESCO disqualification.

3.3.1 Proposal Process

ESCOs will send the requested number of copies of their Proposal to the Facility Owner's Procurement Representative. The process and timetable for Proposal presentations, review and negotiations is stated in Section 3.1.1. All communication regarding Proposal preparations, negotiations, and other matters concerning this performance contract must be addressed to the Facility Owner's Procurement Representative.

3.3.2 Statement of Qualifications

The Statement of Qualifications previously submitted by an ESCO may be referenced in the Proposal. If the Statement of Qualifications contains information that has become outdated since it was originally submitted, the ESCO should present a modification in the appropriate Proposal section. For example, if there have been personnel changes since the Statement was submitted, the ESCO should note new staff responsibilities in the ESCO and Subcontractor Information section.

3.3.3 Required Information and Format

ESCOs providing Proposals should provide the following information in a clear, concise manner according to the prescribed format.

1. ESCO and Subcontractor Information. This section must include: (a) any modifications to ESCO Qualifications and Staff Qualifications provided by the ESCO in its Statement of Qualifications; and, (b) subcontractor information, including name, address, contact person, telephone number, area of responsibility, and brief description of experience.

2. Project Description. This section must include: (a) a description of the Energy Study that the ESCO will perform (see sample format of Energy Study as Appendix C2, Attachment B); (b) a list, description, and justification of energy efficiency measures to be installed; (c) the timetable for implementing the project; and, (d) standards of facility comfort, including heating and cooling season temperatures, hot water temperatures, ventilation levels, and lighting levels. Descriptions and justifications of the energy efficiency measures should be sufficiently clear and detailed to allow the Facility Owner to know the specific equipment, size and quantity that will be installed in each building. Descriptions such as "Lighting Improvements" are not acceptable.

3. Maintenance Services and Warranties. This section must include: (a) a list of equipment that will be covered by manufacturer warranties and ESCO maintenance services; (b) the specific manufacturer warranty for each piece of equipment; (c) the ESCO maintenance coverage and services for each piece of equipment; and, (d) the method that the ESCO will use for both preventive maintenance to avoid operational problems and emergency maintenance in the event of equipment failure.

4. Training Services. This section must include: (a) a list of Facility Owner personnel (or their positions) that will receive training; (b) a specific description of the training that each will receive, including training source, site, location, and hours; (c) when the training will occur during the course of the performance contract; and, (d) the expected capability of each person following training.

5. Project Cost Summary. This section must include the following project cost information: (a) cost of the building automation system; (b) cost of HVAC and related equipment; (c) cost of lighting retrofits; (d) cost of any other equipment; (e) cost of proposed training, per training component and total (including any travel costs); (f) cost of proposed maintenance services, annual and total; and, (g) cost of Energy Study. Detailed cost information is needed to ensure public accountability for equipment and services purchased by the Facility Owner.

6. Project Financing. This section must include: (a) a statement of the dollar amount that will be financed; (b) a description of the financing method that is being proposed; and, (c) a statement of the source of financing and anticipated interest rate.

7. Guaranteed Energy Savings. This section must include for each individual building and the total project: (a) the current annual kwh and ccf consumption, electrical demand level, total energy cost, and cost per square foot; (b) the annual kwh and ccf consumption, electrical demand level, total energy cost, and cost per square foot after project implementation (at existing rates); and, (c) the guaranteed reduction in kwh consumption, kw demand, ccf consumption, and energy costs per month and annually.

8. Operational Savings. This section must include: (a) a description of operational savings resulting from the project; (b) a description of the rationale for each operational saving(s) item listed; and, (c) an explanation of how operational savings are guaranteed.
9. Cash Flow Statements. This section must include the following cash flow statements: (a) a statement using energy cost savings only, with existing energy rates and estimated interest rate; (b) a statement using both energy and

operational cost savings, with existing energy rates and operational costs, and estimated interest rate; and, (c) a statement using both energy and operational cost savings, with a reasonable ESCO estimate of energy cost increases, operational cost increases, and interest rate. Each cash flow statement should specifically define all assumptions regarding energy costs, escalation rates, and interest rate.

10. Project Summary. This section must include the following information: (a) total project cost; (b) amount financed; (c) annual and total energy consumption and energy cost guarantees; and, (d) a brief statement of guarantees and other actions taken by the ESCO to minimize Facility Owner risk related to this project.

11. Official ESCO Statements. This section must include the following statements, signed by an ESCO representative authorized to enter into contractual agreements: (a) statement that the ESCO will finalize the Proposal in accordance with Section 3.1.1 Part 9; and, (b) statement that the ESCO has read and agrees to the terms and conditions and the contract language set forth in the RFP. Any terms or wording that the ESCO does not agree to must be specifically noted in the statement, along with a brief explanation and proposed alternative language. The ESCO should note that any disagreement over the Proposal or contractual terms which cannot be reconciled to the Facility Owner's satisfaction will be grounds for ESCO disqualification.

12. Additional Information. This section must include proof that the ESCO meets bonding and insurance requirements of the project.

3.3.4 Proposal Scoring

A Proposal has a total value of 100 points scored with the following point system: (A) Technical Approach, thirty points; (B) Management Plan, thirty points; (C) Financial Benefits, twenty-five points; and, (D) Cost, fifteen points. A sample evaluation sheet follows:

A. Technical Approach (Possible Score: 30 Points)

This factor gives credit to Proposals that demonstrate a superior technical approach to achieving energy cost savings. In evaluating this factor, evaluators should look for Proposals that:

1) Clearly and specifically describe the proposed energy saving measures, including what existing systems will be modified and how the proposed modification will achieve energy savings;

2) Demonstrate knowledge and understanding of the existing systems and operating constraints and propose appropriate measures;

3) Employ technologies that have been successfully implemented before by the proposer and for which local maintenance, repair, and training support are readily available; and,

4) Clearly demonstrate the quality of the energy savings measurement methodology, including the method to establish baseline usage. Because total payments to the winning proposer must be demonstrated to be less than measured energy cost savings, the proposed method to measure savings must be clearly and completely described. Methods shall verify savings through measurements made over the term of the performance contract.

Based on the *technical approach*, each evaluator assigns a proposer a score on a scale from 1 to 10 (with 10 as the best and 1 the worst score).

Table 3-1: Technical Approach (Possible Score: 30 Points)

Proposer	[1] Raw Score (1 to 10)	[2] Weighted Score [1] x 10%	[3] Points [2] x 30
1) 2) 3)			

B. Management Plan (Possible Score: 30 Points)

This plan should demonstrate the proposer's understanding of Performance Contracting and energy efficiency construction projects in general and the constraints of the participating Facility Owner in particular. In evaluating management plans, evaluators should consider:

1) Clear assignment of responsibility for each project task to a specific individual;

2) Comprehensiveness of management, maintenance, and monitoring services offered;

3) Methods to ensure minimum disruption of Facility Owner operations;

4) Ability to coordinate project construction with local utilities, subcontractors, suppliers, and Facility Owner personnel;

5) Provisions for response and repair in event of emergency; and,

6) Flexibility to modify the proposal and allow for Facility Owner staff input to equipment design, selection, operation, and maintenance on an ongoing basis.

Based on the *management plan*, each evaluator assigns a proposer a score on a scale from 1 to 10 (with 10 as the best and 1 the worst score).

Table 3-2: Management Plan (Possible: 30 Points)

Proposer	[1] Raw Score (1 to 10)	[2] Weighted Score [1] x 10%	[3] Points [2] x 30
1) 2) 3)			

C. Financial Benefits (Possible Score: 25 Points)

The Facility Owner will prefer Proposals that responsibly maximize financial benefits. In evaluating financial benefits, evaluators should consider:

1) The projected net financial benefits to the Facility Owner over the life of the measures (the Facility Owner may include benefits from avoided equipment replacement or maintenance cost savings when calculating net financial benefits);

2) The gross energy savings over the agreement term;

3) Terms of the guarantee of the project's energy savings and/or financial performance;

4) Proposed methods to minimize project risks, including contract terms to accommodate changes in building use, early termination, or other needs of the facility; and,

5) Comparative cost of financing (i.e. interest rate).

Based on the *financial benefits*, each evaluator assigns a proposer a score on a scale from 1 to 10 (with 10 as the best and 1 the worst score).

Table 3-3: Financial Benefits (Possible Score: 25 Points)

Proposer	[1] Raw Score (1 to 10)	[2] Weighted Score [1] x 10%	[3] Points [2] x 25
1) 2) 3)			

D. Cost (Possible Score: 15 Points)

The Facility Owner will prefer Proposals that provide services at the lowest possible cost. The points allocated to higher cost Proposals will be equal to the lowest cost multiplied by the maximum points available, divided by the higher Proposal cost. If necessary to achieve a consistent basis to compare Proposals, the Facility Owner may apply its own assumptions or conventions for the purpose of estimating Proposal prices.

As an example, assume that Acme ESCO and Superior Services submit Proposals on a project with a hypothetical construction cost of $1,000,000. A single assumed construction cost is used to allow a common basis for cost

comparison. Superior Services' cost is $1,600,000 and Acme ESCO's is $2,000,000. Superior Services receives the maximum points available because they proposed the lowest cost. Acme ESCO's score is calculated by dividing $1,600,000 by $2,000,000, multiplied by the maximum points available.

Based on the cost, each evaluator assigns a proposer a score on a scale from 1 to 10 (with 10 as the best and 1 the worst score).

Table 3-4: Cost (Possible Score: 15 Points)

Proposer	[1] Raw Score (1 to 10)	[2] Weighted Score [1] x 10%	[3] Points [2] x 15
1) Acme ESCO	*8*	*0.8*	*12*
2) Superior Services ESCO	*10*	*1.0*	*15*
3)			

Table 3-5: Summary Scoresheet

Proposer	Technical Approach (max. 30)	Mgmt. Plan (max. 30)	Financial Benefits (max. 25)	Cost (max. 15)	Total (max. 100)
1)					
2)					
3)					

3.3.5 Determining Proposal Rank

After scoring all submitted Proposals, each evaluator determines his or her rank (first, second, third,) for each Proposal.

Table 3-6 shows a structured method for determining overall rank from the scores reached by individual committee members. This method assigns points to each proposer based on the Evaluation Committee members' individual rankings. First, second, and third place ranks are assigned points equal to their rank. The points assigned to each Proposal are totaled and the lowest overall score is the highest-ranked Proposal.

Table 3-6: Determination of Overall Rank

	Proposer A	Proposer B	Proposer C
Evaluator 1			
Evaluator 2			
Evaluator 3			
Evaluator 4			
Evaluator 5			
Total Points			
Overall Rank			

3.4 Energy Study

The selected ESCO will prepare an Energy Study that meets the prescribed format and other stated requirements. An Energy Study that does not adhere to the prescribed format and requirements may result in ESCO disqualification.

3.4.1 Energy Study Process

The ESCO will submit the requested number of copies of its Energy Study to the Facility Owner's Project Manager. The process and timetable for Energy Study presentations, review and negotiations is stated in Section 3.1.1. All communication regarding Energy Study preparations, negotiations, and other matters concerning this performance contract must be addressed to the Facility Owner's Project Manager.

3.4.2 Statement of Qualifications

The Statement of Qualifications and Proposal previously submitted by the ESCO may be included in the Energy Study by reference. If either the Statement of Qualifications or Proposal contains information that has become outdated since it was originally submitted, the ESCO should acknowledge the modification in the Energy Study. Keep in mind that the Energy Study is a document which supports the Proposal. Accordingly, if there have been personnel changes since the Proposal was submitted, the ESCO should note new staff responsibilities in the ESCO and Subcontractor Information section. All modifications and the original Statement of Qualifications and Proposal are considered part of the ESCO Energy Study.

3.4.3 Required Information and Format

This Energy Study includes engineering studies that show the cost, energy and cost savings, and payback of energy efficiency measures for the Facility Owner's facility. The Energy Study also must show assumptions and calculations used to obtain savings levels. (Please see Appendix C2, Attachment B).

IV. PREPARING AN ENERGY PERFORMANCE CONTRACT

4. PREPARING AN ENERGY PERFORMANCE CONTRACT

THIS CHAPTER DESCRIBES GENERIC TERMS AND PROVIDES SAMPLE MATERIALS RELATING TO ENERGY PERFORMANCE CONTRACTS. BECAUSE SPECIFIC PROJECT AND FACILITY OWNER REQUIREMENTS MAY VARY SIGNIFICANTLY, THESE MATERIALS SHOULD NOT BE INTERPRETED AS LEGAL ADVICE RELATING TO ANY SPECIFIC SOLICITATION OR PROJECT. EACH FACILITY OWNER SHOULD CONSULT ITS OWN LEGAL ADVISORS BEFORE SOLICITING OR ENTERING INTO ANY ENERGY PERFORMANCE CONTRACT.

Performance contracts usually affect capital equipment essential to the Facility Owner's mission and can easily involve total investments in the millions. The contract establishes a long-term relationship between the Facility Owner and ESCO, and Facility Owners should develop terms to address potential issues with great care. The ultimate goal of the contracting process is to reach an agreement that is equitable to both parties, protects the interests of the Facility Owner, and is so clear that any third parties reading it will interpret it the same way.

4.1 Types of Energy Performance Contracts

The services provided under an energy performance contract may be for financing, design, installation, repair, maintenance, management, technical advice, and/or training. Energy performance contract options for public facilities include: leasing; shared savings plans; joint ventures; or energy service contracts. Of these, leasing and shared savings plans are the most common types of performance contracts used by local governments and school districts, and are described in detail below.

4.1.1 Leasing

Under a lease (or lease-purchase) agreement, the Facility Owner agrees to make a fixed payment to the ESCO for a fixed term. In addition to designing, operating, and maintaining the improvements, the ESCO guarantees that energy and maintenance savings from the project will exceed the payments to the ESCO. The net effect is similar to that under a shared savings plan. Please note that as a financing source, under a lease-purchase agreement, the ESCO may seek secondary repayment sources through the collateralization of Facility Owner buildings, furniture, fixtures, and equipment.

4.1.2 Shared Savings Plans

Under a shared savings plan, the Facility Owner agrees to pay a contractually specified amount of measured energy cost savings for the ESCO's design, installation, operation, and maintenance of the Facility Owner's facility. Shared savings plans are very simple in concept and have the advantage of being easily explained to administrators and policy-makers. The Facility Owner and ESCO agree on a method of measuring savings and a

formula for "splitting" these savings. This arrangement automatically ensures that the Facility Owner will pay less after implementing a performance contract.

It is important to note that both the guaranteed lease and shared savings approaches offer the same scope of services to the Facility Owner. The key difference between the two is the method used to determine price, payments, and the mechanism that guarantees the performance contract will reduce overall costs.

4.2 Key Issues to Address in a Performance Contract

The following paragraphs list key terms to consider in developing a performance contract with the ESCO (referred to as "the Contractor" below). The Facility Owner should always reserve the right to include additional terms in the performance contract, or to refrain from including any or all of the following terms. A sample Energy Performance Contract is attached as Appendix C2, Attachment C.

4.2.1 Contractor's Services (Scope of Work)

As in any contract, the scope of work that the Contractor is responsible for completing must be described clearly and completely. In a performance contract, the Contractor may be performing services in several different areas. Common services include:

- Engineering and design services;
- Construction services (including any licenses and permits required);
- Operations and maintenance services (including preventive maintenance, repairs, and emergency service); and
- Training services (to ensure facility staff can operate equipment).

The Contractor is usually responsible for all equipment repair and scheduled maintenance. In some cases, using on-site facility personnel to perform some maintenance may reduce costs. Usually the on-site personnel retain most operating responsibilities.

4.2.2 Facility Owner Responsibilities

Generally, the efficiency improvements installed by the Contractor depend on certain actions by the Facility Owner in order to achieve savings. The Facility Owner must make sure that the performance contract describes its obligations very clearly. This ensures that the Facility Owner understands its commitment and prevents the Contractor from unreasonably claiming that savings were not achieved due to omissions by the Facility Owner. Facility Owner responsibilities may include operating or maintaining existing equipment in a way that helps the Contractor's improvements to achieve savings. For example, if the Contractor proposes energy management controls for an existing air conditioning system, the Contractor may ask the Facility Owner to maintain the system to an agreed upon standard.

4.2.3 Compensation

The performance contract must establish what price will be paid for the Contractor's services, the timing of payments, and how payments will be calculated. The Energy Study includes a calculation of the final price.

4.2.4 Term

The performance contract must state the term of the agreement and under which circumstances it may be terminated. Possible reasons for termination include failure to appropriate sufficient funds for the continuation of the performance contract, or default.

4.2.5 Ownership of Equipment

The performance contract should make clear who owns the equipment installed by the Contractor at all times during the contract. Equipment ownership may be important to the Contractor for purposes of securing financing or for the tax treatment of the Contractor's revenues under the performance contract. Specific language could include that all equipment installed by the Contractor remains the property of the Contractor during the term and ownership transfers to the Facility Owner at the expiration of the performance contract. The Facility Owner should consult its attorney should the proposer wish to alter this provision.

In cases where the Contractor's equipment includes software, the Facility Owner should ensure that it receives a license, both during the contract term and perpetually afterwards, to use the software to the extent necessary to operate facility equipment.

4.2.6 Standards of Service and Comfort

One inappropriate way a Contractor could increase savings might be to reduce the amount of cooling or lighting below the levels customarily provided in the facility. In order to prevent this, the contract must establish what levels of cooling and lighting are considered acceptable and require the Contractor to design, install, and maintain equipment to provide these levels. Specific language should include standards of service and comfort, including space temperature, humidity, outside air ventilation, and light levels. Facility Owners should carefully consider any special service standards (such as computer rooms and laboratories) and ensure they are included in general or special provisions.

4.2.7 Savings Measurement

In a performance contract, savings measurement is a vital issue. Generally, a performance contract requires the Contractor establish an energy baseline. Savings measurement issues are discussed further in Part 5.

Material Changes and Baseline Modifications

An issue related to savings measurement is what to do if the operation or equipment of the facility changes, making the original energy baseline unrepresentative of the actual operation. Generally, performance contracts provide that when the facility changes in a way that significantly affects the project energy savings, the baseline may be modified.

4.2.8 Risk Management

The performance contract should include language to protect the Facility Owner from damages or liability that may arise due to the Contractor's performance or non-performance under the contract. Facility Owner's should not accept a disclaimer stating that the Contractor shall not be responsible for any indirect, incidental, or consequential damages arising from the work. If such change is suggested, the Facility Owner should contact its attorney for assistance.

The Contractor should be required to provide a performance bond following contract award. Should the Contractor fail to perform through no fault of the Facility Owner, the bond will cover the completion of performance. A payment bond should also be provided to cover the prompt payment to all others for all furnished labor and materials.

Other typical requirements include bodily injury and property insurance coverage to be carried by the Contractor and a general indemnification by the Facility Owner.

Another type of insurance policy to consider is a guarantee of energy savings. If the energy savings are to be bonded, the contract should state that this bond is for a one-year period renewable annually upon request by the Facility Owner in an amount reduced by the energy savings realized in previous years. The surety company may have other requirements for this type of bond.

4.2.9 Trade Names and Patent

Whenever an article of any class or materials or equipment is specified by the trade name of any particular patentee, manufacturer or dealer, or by reference to the catalog of any such manufacturer or dealer, it should be taken to mean and specify the articles or materials described are equal thereto in quality, finish, and durability and equally as serviceable for the purpose for which it is or they are intended. The Facility Owner should make the decision as to whether the material or equipment offered is equal to that specified within the Proposal/Energy Study. The decision of the Facility Owner should be final.

4.2.10 Patent and Patent Rights

The Contractor should protect and hold the Facility Owner harmless against all claims and actions brought against the Facility Owner by reason of any actual infringement upon patent rights in any material, process, machine or appliance used by the Contractor in the work.

4.2.11 Right-of-Way

The necessary rights-of-way for any construction to be done across or on private property should be obtained by the Facility Owner, when feasible. The Contractor should take due and proper precautions against any injury to adjacent structures and should hold himself strictly within the rights secured to him by the Facility Owner in executing the work on private property.

4.2.12 Labor Laws and Ordinances

The Contractor should obey and abide by all the laws of the State of South Carolina relating to the employment of labor and public work, and all ordinances and requirements of the Facility Owner regulating or applying to public improvements.

The Contractor should agree not to discriminate against any employee or applicant for employment, to be employed in the performance of the performance contract, with respect to hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of age, sex, race, color, religion, national origin, or ancestry. The Contractor should further agree that every subcontract entered into for the performance of the contract contain a provision requiring nondiscrimination in employment, as herein specified, binding upon each Subcontractor. Breach of this covenant should be regarded as a material breach of the performance contract.

4.2.13 Assignment or Subletting of Performance Contract

In the execution of the performance contract it may be necessary for the Contractor to sublet part of the work to others; however, the Contractor should not award any work to any Subcontractor without prior written approval of the Facility Owner, which approval should not be given until the Contractor submits to the Facility Owner a written statement concerning the proposed award to the Subcontractor. This statement should contain such information as the Facility Owner may require. Approval should not be unreasonably withheld.

The Contractor should be fully responsible to the Facility Owner for the acts and omissions of Subcontractors and of persons either directly or indirectly employed by the Subcontractors, as well as the acts and omissions of persons directly employed by Contractor.

Nothing contained in the performance contract should create any contractual relation between any Subcontractor and the Facility Owner.

The Contractor should not assign, transfer, convey, or otherwise dispose of the performance contract, or any part hereof, or his/her right, title or interest in the same or any part thereof, without the previous consent of the Facility Owner. The Contractor should not assign by power-of-attorney, or otherwise any of the moneys due or to become due and payable under the performance contract, without the previous written consent of the Facility Owner.

4.2.14 Workers' Compensation Insurance

The Contractor should procure and maintain during the life of the performance contract Workers' Compensation Insurance in accordance with the workers' compensation requirements of the State of South Carolina, adequately protecting all labor employed by the Contractor during the life of the contract and should provide evidence to the Facility Owner that such insurance is in fact in force. All Certificates of Insurance should be forwarded to the Facility Owner.

4.2.15 Comprehensive General Liability Insurance

The Contractor should procure and maintain in effect during the life of the performance contract Comprehensive General Liability Insurance in an amount not less than $1,000,000 each occurrence and $1,000,000 aggregate for Bodily Injury Liability and $1,000,000 each occurrence for Property Damage Liability. In addition, Comprehensive General Liability Insurance should include coverage for Personal Injury Liability (including employment related suits), Independent Contractors Liability, Blanket Contractual Liability, and Products and completed Operations Liability.

4.2.16 Comprehensive Automobile Liability Insurance

The Contractor should procure and maintain in effect during the life of the performance contract Comprehensive Automobile Liability Insurance with residual limits of $1,000,000 each occurrence for Bodily Injury and Property Damage Liability. Such coverage should include Employers Non-Owned and Hired Car Liability and should cover all vehicles owned, leased, operated by or for or on behalf of the Contractor.

4.2.17 Indemnification

The Contractor should agree to indemnify, defend, and hold the Facility Owner harmless from any and all claims, actions, costs, expenses, damages and liabilities, including reasonable attorney fees, arising out of, connected with or resulting from the negligence or misconduct of Contractor or its employees or other agents in connection with its activities within the scope of the performance contract, insofar as any such loss or claim is not covered by available insurance proceeds.

4.2.18 Performance and Payment Bonds

A Performance Bond and Labor and Material Payment Bond must be a requirement of the successful bidder as Contractor per South Carolina State laws.

4.2.19 Compliance with Law and Standard Practices

The Contractor should perform its obligations herein in compliance with any and all applicable federal, state, and local laws, rules and regulations, including applicable licensing requirements, in accordance with sound engineering and safety practices, and in compliance with any and all reasonable rules of the Facility Owner relative to the premises. The Contractor should be responsible for obtaining all governmental permits, consents, and authorizations as may be required to perform its obligations.

4.2.20 Qualifications

The submission of a proposal should deem permission to the Facility Owner and to its consultants to make inquiries concerning the Contractor and its principals, officers, and directors to any persons or firms the Facility Owner deems appropriate.

4.2.21 Key Personnel

Key personnel assigned to this project by the Contractor and its Subcontractors should not be removed from this project without the prior written approval of the Facility Owner. Such approval should not be unreasonably withheld.

4.2.22 Representations and Warranties of Contractor

The Contractor should provide the following representations and warrants:

A. The Contractor is familiar with all documents appended to the performance contract and with all applicable laws and regulations.

B. The Contractor is duly organized, validly existing, presently in good standing and having all necessary powers to enter into the performance contract and to do business in the State of South Carolina.

C. There is no pending or threatened labor dispute, strike, or work stoppage affecting Contractor's business.

D. There is no suit, action, arbitration or legal, administrative, or other proceeding pending, or to the best knowledge of the Contractor, threatened against the Contractor that would affect or impair the performance by Contractor of the performance contract.

E. The Contractor has obtained all registrations, licenses, certificates of inspection, reports, or other clearances required to be obtained of any governmental agency in order to enable it to fully perform the terms of the performance contract.

F. The Contractor has the right, power, legal capacity, and authority to enter into and perform all its obligations under the performance contract and no approval or consent of any person other than the Contractor is necessary to effect the execution and performance of the performance contract by the Contractor.

G. There are no other circumstances which would adversely affect the Contractor's ability to execute the performance contract and fully perform its obligations.

H. The information in all documents, lists, policies, and other writings furnished, or to be furnished, to the Facility Owner by, or on behalf of, the performance contract is true and accurate and does not fail to include any statement of a material fact, the omission of which would be misleading.

I. None of the representations or warranties made by the Contractor, or made in any certificate or memorandum furnished, or to be furnished, to the Facility Owner by, or on behalf of, the Contractor, contains or will contain any untrue statement of a material fact, or omit any material fact, the omission of which would be misleading.

J. The Contractor shall, at the Contractor's expense, provide the Facility Owner with such evidence of the accuracy of any and all representations as the Facility Owner may require. The Contractor shall, at Contractors expense provide the Facility Owner with such other evidence of Contractor's compliance with the terms of the performance contract as the Facility Owner may require.

V. PROJECT IMPLEMENTATION

5. PROJECT IMPLEMENTATION

5.1 Measuring Energy Savings

5.1.1 Establishing a Baseline

Energy savings can be estimated, but not be directly measured. Savings are always a calculated difference between (1) what was actually used and (2) what would have been used if improvements had not been made. The second part of this formula is the energy baseline: "a calculation of each type of energy that would have been consumed in existing facilities, if the ESCO had not installed energy efficiency measures."[3]

Energy baselines can be calculated differently depending on which energy efficiency measures are being evaluated. A baseline may be created from historical utility billing data, or special purpose metering of existing equipment. The simplest energy baseline is a previous year's utility bills. This is illustrated in Figure 5-1. In this example, savings would be calculated by the difference between the future usage and the usage in the baseline year. See Figure 5-2.

There are several problems with this type of simplified analysis. In any particular year, various influences will make energy use increase or decrease in unpredictable ways. These irregularities, if incorporated into the baseline, will over- or under-estimate the true savings. This is sometimes addressed by using the average of two or more years to establish the baseline.

Averaging over several years helps reduce random yearly variations in the baseline, but will not address long-term trends. For example, if a facility is increasing its hours of use and adding new equipment, a more accurate forecast of future use might show a steady increase. In this case, using a particular year or average of previous years will underestimate the savings. If energy use has been tending to decline due to reduced enrollment, reduced hours of operation, or other efficiency improvements, a historical baseline will over-estimate savings.

[3] Definition of the energy baseline for a sample contract.

Figure 5-1: A 12-Month Energy Baseline

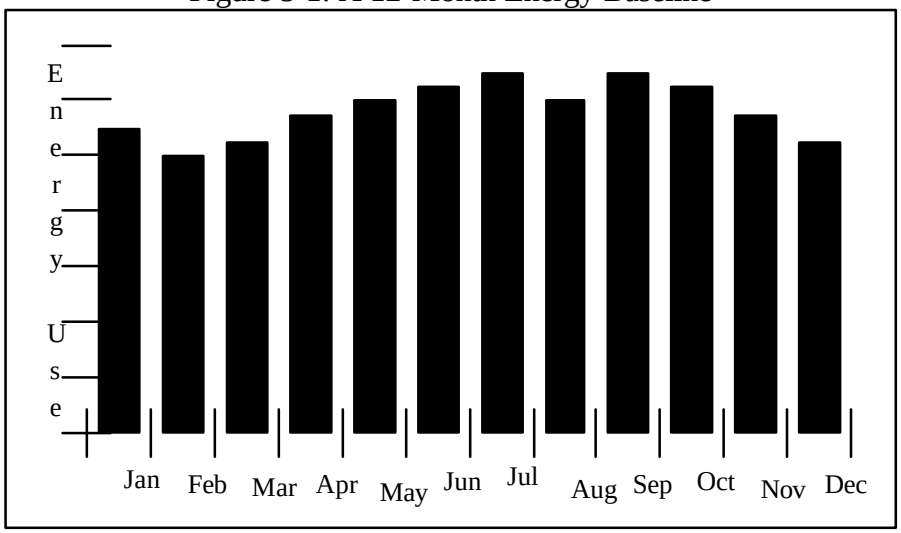
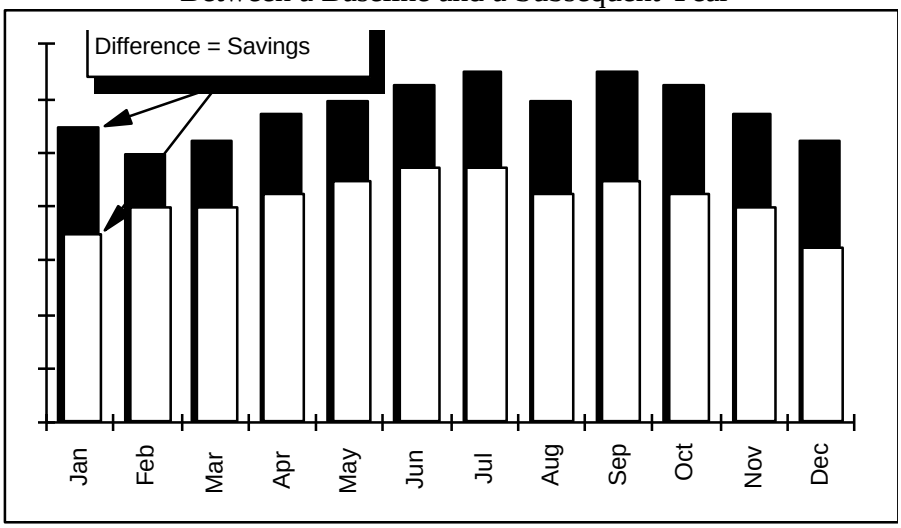


Figure 5-2: Savings Calculated by the Difference Between a Baseline and a Subsequent Year



The primary disadvantage of using billing data to measure savings is that it reflects not just the impact of the energy efficiency equipment, but the impact of all changes that have an effect on building energy usage. These include weather, changes in occupancy, addition or removal of equipment, and many others. In order to reliably use billing data as a baseline, we must establish that these other factors have small impacts compared to the efficiency measures or determine a method to adjust for their effect.

One common method to adjust for the impacts of other factors is to develop a computer model of the facility's energy use. The inputs to this model are adjusted until the predicted energy use agrees closely with the historical use. This calibration is intended to ensure that the model is a valid representation of the facility's energy performance. Data

on weather, schedule, connected loads, and building area are entered into the model on an annual basis in order to calculate the baseline energy use based on that year's actual operating and weather conditions. One major disadvantage of this method is that because of the opportunity (and incentive) for the ESCO to change the model in its favor, the Facility Owner's staff must become equally knowledgeable about the computer model and its sensitivity to different data inputs. Annual adjustment of the baseline creates a regular opportunity for major disputes to arise.

An alternative approach designed to overcome these disadvantages is to use end-use or equipment-level metering to establish a baseline. For example, savings from lighting upgrades can be accurately determined by measuring the connected load (in watts or kilowatts) of the existing lighting and the new, upgraded lighting and the operating hours of the lighting after the upgrade. The calculation of baseline energy use is then simply the pre-upgrade kilowatts multiplied by the hours of use after the upgrade. This is shown in the equation below:

$$\textit{Baseline energy use (kilowatt-hours)} = \textit{kilowatts}_{pre} \times \textit{hours of use}$$

The energy use after the retrofit ("post-retrofit") is the new kilowatts multiplied by the hours of use. The equation for the energy use of the new lighting system is:

$$\textit{Post-retrofit energy use (kilowatt-hours)} = \textit{kilowatts}_{post} \times \textit{hours of use}$$

Since the energy savings is the post-retrofit energy use subtracted from the baseline energy use, the equation for the energy savings can be simplified to:

$$\textit{Energy savings} = (\textit{kilowatts}_{pre} - \textit{kilowatts}_{post}) \times \textit{hours of use}$$

The energy savings is the difference between post-retrofit and "baseline" lighting wattage, multiplied by the light fixture hours of use after the retrofit. If usage declines after the lighting upgrade, then calculated energy savings will also decline.

In practice, calculation of energy baselines based on equipment metering may be more complex. Only for simple lighting fixture replacements is it this simple. The baseline calculation for other devices, such as air conditioning chillers, fan motors, or chilled water pumps, is fundamentally the same as in this example. In the case of cooling equipment, other variables, such as weather and indoor temperature, should also be considered. Nevertheless, energy baselines can still be developed using measurement of the equipment demand under various conditions and appropriate measurement of operating hours under similar conditions. In most cases involving air conditioning systems, an understanding of the engineering principles basic to refrigeration and fluid dynamics is necessary in order to fully evaluate the validity of an energy baseline calculation based on equipment metering.

Each alternate approach has advantages and disadvantages. Establishing an energy baseline using billing data is low cost, because the metering and data collection are already being performed. Billing data reflects changes in energy use at a facility. Therefore, if many different improvements are implemented in a comprehensive project, a single measurement evaluates the impact of all of them together, including all of the possible

interactions between the improvements. If there are significant changes in energy use that are unrelated to the efficiency improvements, then this all-inclusive feature is also a disadvantage.

Equipment metering has the potential advantage of observing only the change in energy use accomplished by the efficiency improvement. This is usually true for lighting and motor efficiency upgrades. However, for cooling improvements, other influences such as weather effects and thermostat setpoints affect the energy used and must be included in the baseline calculation. Since metering must be specially installed, read, and calibrated for the duration of the contract, it is more expensive than analysis of utility billing data. Interactive effects between improvements (for example, lighting improvements reduce the amount of cooling required) may be impossible to measure. ESCOs will often propose that an estimate of interactive savings be added to the amount measured. However, this practice may result in double-counting.

Table 5-1: Advantages and Disadvantages of Alternate Energy Baseline Calculation Methods

Method	Advantages	Disadvantages
Utility Billing History	• Low cost • Data already available • Independent data • Represents effects of all EEMs • Accounts for interactive effects	• Effects of weather, occupancy, other changes may mask savings • May be unreliable unless savings are large compared to normal bill variations
Equipment Metering	• Isolates effect of EEM • Very accurate for lighting measures • Results are more predictable (lower risk)	• Higher cost • Misses interactive effects

The selection of the appropriate method to calculate the energy baseline depends partially on what energy efficiency measures are finally adopted. The ESCO should identify and propose the methodology for each measure used in its Proposal. The Proposal will be supported by the Energy Study. As a result, the Facility Owner will have the option of reviewing and approving the methodology before the contract is executed.

5.1.2 Modifying the Baseline

As mentioned in Section 4.2.7, the use, equipment, or buildings of a facility may change in a manner that makes the previous energy use baseline unrepresentative of the facility. To take an extreme example, reducing a building's operating hours from 60 to 40 hours a week would reduce energy usage significantly. This reduction would not be energy "savings" under the performance contract because the reduction did not result from equipment installed by the ESCO, but from unrelated changes in usage. If the utility bills

from a previous year were the baseline for measuring savings, the savings measurement would include not only the actual savings but the savings from reduced operating hours as well. This would be considered a "material change" and should result in a modification of the baseline.

Since conditions change regularly in most facilities, only certain changes should trigger a baseline modification. Changes that are likely to have little or no impact on energy use should be ignored as far as the baseline is concerned. A standard should be established in the performance contract to clearly define which changes will be considered "material". Standard language used in typical performance contracts is any change "which may reasonably be expected to change the energy consumption of the facility by more than ten percent of the total energy savings." In such an event, the ESCO and Facility Owner mutually agree on an appropriate modification.

If "material changes" are listed in the performance contract, they could include:

- Changes in occupied square footage;
- Changes in operating hours of the facility;
- Changes in the facility's energy equipment or operating parameters other than the ESCO equipment;
- Changes in weather between the base year and guarantee year as measured by daily degree-day comparisons;
- Energy equipment, other than ESCO equipment, malfunctions, repaired, or replaced in a manner that increases or decreases energy consumption;
- Other actions taken by the Facility Owner that may reduce or increase energy use; and,
- Discovery of an error in the original baseline, in which case the change would be retroactive.

Changes in the baseline are always made by mutual agreement between the Facility Owner and the ESCO.

5.2 Monitoring and Managing a Performance Contract

5.2.1 Project Meetings and Reports

Section 2.4, *Organizing a Project Team*, describes the need for a multi-department approach (involving Facility Owner's management and planning, procurement, budget, and legal staff) during project development and ESCO selection. After the contract award, the on-site facility administrators are primarily responsible for the day-to-day oversight of the ESCO.

After contract award, a project proceeds in two phases: (1) Construction and Commissioning, and (2) Operation. The key to managing the project is to ensure timely and complete communication between the ESCO and Facility Owner staff. Meetings held at major project milestones establish a pattern of communication and mutually agreed benchmarks that can then be used to monitor and control the progress of the project. Table 5-2 summarizes major milestones and topics that need to be discussed at each one. Once the performance contract is awarded, it is easy for the Facility Owner staff to focus on regular responsibilities and for the ESCO to focus on the current task and forget to keep the Facility Owner staff informed. A schedule of regular project meetings helps prevent surprises and keeps the ESCO on track.

Table 5-2: Milestone Meetings

Pre-design meeting
Notice to Proceed with design
Design meeting (1)
Review and evaluate design (i.e. plans and specifications, products, costs)
Design meeting (2)
Review and approve final design
Installation plans meeting
Present installation plans
Commissioning, testing, and training meeting
Notice of Completion
Plan for acceptance testing of work
Plan for facility personnel training
Plan for installation documentation
Schedule for first-year preventive maintenance
Schedule for first-year measurement activities
Annual project review meeting
Calculation of energy savings and baseline modifications
Schedule for next year's measurement activities
Schedule for preventive maintenance and training
Occupant complaints, standards of service, etc.

5.2.2 Construction and Commissioning Phase

The Construction and Commissioning Phase of the project requires the most coordination and interaction between the ESCO and Facility Owner. This phase begins with the Notice to Proceed with design of the project.

During this phase, weekly project meetings should be held for the ESCO to make status reports. A typical performance contract requires the ESCO to submit installation plans for approval before initiating construction. Standard language for a performance contract also requires ESCO submittal of work schedules and notices of utility interruption in advance. These matters would be regularly updated in the weekly meetings.

Management of the design and construction phase of the performance contract is essentially the same as the management of a large design/build retrofit or repair and maintenance project. However, performance contracts incorporate several other elements that are not associated with conventional retrofits. These include training staff, maintaining equipment, monitoring standards of service and comfort, and verifying savings. Unlike construction management, which is completed once the installation has been accepted, these other activities must be monitored for the duration of the performance contract (often ten years) in order to receive full value from the project.

5.2.3 Annual Monitoring of Savings and Standards of Service

The ESCO is required to document in its Energy Study "the method of determining energy savings and compliance with Standards of Service annually throughout the contract term." This method should be referred to and checked against a schedule of first year measurement activities that the ESCO submits for approval at the commissioning meeting (see Table 5-2). This schedule should include a joint annual inspection of all of the ESCO-installed equipment to verify that equipment is being operated and maintained as designed. The annual meeting should review the calculation of energy savings for the previous year, including any material changes or modifications of the baseline. At each annual meeting the schedule of measurement activities for the following year should be reviewed and approved.

These annual meetings are not a substitute for ongoing monitoring of maintenance activities and standards of service and comfort or regular auditing of energy savings estimates included in ESCO invoices. The meetings supplement these ongoing activities and provide an opportunity for a comprehensive review of the performance of the project on a facility-wide basis. Because they are not in response to an immediate problem, they make it easier to observe trends and longer term facility changes. The meetings also serve as an annual opportunity for Facility Owner staff to ask questions and offer suggestions to the ESCO regarding how to optimize system performance.

5.2.4 Maintenance Monitoring

One of the benefits of Performance Contracting is that the ESCO has a strong financial interest in ensuring that maintenance is properly performed. Poor maintenance can reduce savings or cause standards of service and comfort to deteriorate below performance contract requirements. Both of these results are potentially costly to the ESCO. A schedule for regular maintenance activities should be established and monitored and comfort complaints should be used as a warning that closer attention may be needed.

Since maintenance responsibilities may be split between the ESCO and the Facility Owner, equipment for which the ESCO has maintenance responsibility should be clearly and prominently marked. This helps prevent inadvertent "takeover" of ESCO responsibilities by the Facility Owner staff.

Appendix A Feasibility Analysis Worksheet

Energy performance contracts can be used to finance a wide variety of projects and services. However, not all projects or facilities have the right combination of needs and opportunities. Operational or technical barriers may make a performance contract difficult to implement.

Stability of usage is very important to the economics of performance contracts. If past usage is highly variable, developing a baseline is more difficult and savings may be hard to measure. If future usage is uncertain, the projected savings of the energy efficiency measures may be too unreliable to qualify for financing. For example, the possibility of a partial or complete facility closure before the expected end of the contract will make project financing difficult.

Two simple rules of thumb may be used to evaluate whether a facility has adequate potential to attract proposals for a performance contract. (1) Projects with a total cost of less than $50,000 may not be feasible, because the administrative and other fixed costs involved in financing cannot be recovered in a reasonable period of time. (2) The simple payback (SPB) of the project should be five years or less. The simple payback is the project's construction cost divided by its annual project savings.

Use this worksheet to identify potential obstacles and opportunities. Remember to consult with other personnel, particularly with respect to plans for future changes. Including representatives of the following functions may be useful:

- Upper management/ administration;
- Facility operation and maintenance;
- Facilities planning;
- Building users;
- Budget and finance; and
- Legal

1. STABILITY OF OCCUPANCY AND USE

1-1 What changes in facility use, schedule, or occupancy may have significantly changed energy use in the past five years? _____

1-2 Have energy saving measures been installed in the last five years? If yes, list them. _____

1-3 Have any equipment replacement, remodeling, or construction projects been started in the last five years? If yes, describe briefly. _____

2. PLANNED CHANGES

2-1 Are any near-term (next five years) changes in facility use, schedule, or occupancy planned which may significantly affect energy use? _____

2-2 Are any energy efficiency projects currently planned? If yes, please describe. _____

3. HISTORICAL ELECTRICITY USAGE

3-1 Does facility electricity use show a consistent pattern from year to year? Yes_____ No_____ Notes:_____

To decide whether use is consistent, consider the following: Does the total annual use change by less than 15 percent from year to year? Does the maximum monthly use occur in the same season from year to year? If yes, these are indicators of stable usage. Using a computer spreadsheet program to chart use for different years is a good way to visually check whether use is consistent.

4. EVALUATE LIKELIHOOD OF FACILITY CLOSURE

What is the likelihood that part or all of the facility will be closed within the next five years? The next ten years?

Next five years	Next ten years
__ impossible	__ impossible
__ extremely unlikely	__ extremely unlikely
__ not very likely	__ not very likely
__ likely	__ likely
__ certain	__ certain

If you answered "likely" or "certain," what percentage of the facility will be affected? _____% _____%

5. EVALUATE FACILITY CONDITION

5-1 What is the condition of major energy-using equipment at your facility? This includes lighting and air conditioning equipment. _____

5-2 Has an asbestos survey been completed? Is asbestos present in the facility? If so, where and how extensively? _____

5-3 Are other hazardous materials present (for example, PCBs in fluorescent ballasts)? _____

5-4 Are there significant comfort or reliability problems due to deferred maintenance, equipment age, etc.? _____

6. EVALUATE MANAGEMENT SUPPORT

6-1 Is the concept of performance contracting familiar to personnel who will be involved in or affected by a project? _____

6-2 Who has authority to sign a performance contract? Is this person aware of the possibility of a project and the potential benefits/risks? _____

6-3 What kinds of outside assistance or expertise may be required to complete a performance contract at your facility? _____

Compare your responses to the previous questions to the list of favorable characteristics shown in Table A-1.

TABLE A-1
FAVORABLE CHARACTERISTICS FOR PERFORMANCE CONTRACTING

- Building occupancy and energy use have been stable in recent years.
- Buildings are occupied 3,000 hours per year or more.
- Annual energy costs for the facility (one or more buildings) exceed $50,000 per year.
- No significant changes in occupancy, schedule, or major equipment are anticipated in the near future.
- The facility is unlikely to close or reduce its size or operating hours substantially in the next ten years.
- The facility is in good repair and hazardous materials such as asbestos are not likely to be disturbed by efficiency improvements.
- Facility administrators understand performance contracting and support its use at the facility.

Buildings do not need to have all these characteristics in order to be acceptable candidates. However, if a facility does not have four or more of these characteristics it is a good idea to contact potential qualifiers directly, describe the

project, and ask whether they would be likely to provide a Statement of Qualifications if an RFQ is issued.

From the potential qualifiers point of view, the administrative costs to prepare a Statement of Qualifications, Proposal, organize a project team, and arrange financing are almost the same for a small project as for a large one. As a result, potential qualifiers generally have a minimum threshold for the size of a project. Evaluating facility data and feasibility helps to ensure that the potential project is large enough to attract responsive proposals. Discussions with ESCOs indicate a project construction cost of $50,000 is the minimum that will attract proposals in South Carolina.

Before beginning a new evaluation of technical potential, review information on-hand regarding energy efficiency opportunities. Past energy audits or studies may provide an acceptable evaluation of the facility's technical potential. Review any prior energy studies to make sure the underlying assumptions about facility occupancy, schedule, structure, and equipment are still valid. Utility rates and construction cost estimates may need to be updated to current levels.

7. REVIEW PREVIOUS ENERGY STUDIES

Collect any previous energy study reports for the facility.

7-1 Review the assumptions (for example occupancy and schedule) of any completed studies. Are they still realistic? _____

7-2 Do the studies furnish estimates of implementation costs and energy cost savings? _____

7-3 Have any of the recommended efficiency improvements already been implemented? If so, please list. _____

7-4 List any other efficiency opportunities documented by other sources (for example, vendor proposals). _____

If the previously completed energy studies (or other sources) document energy savings opportunities (not yet implemented) with a construction cost of $50,000 or more and an overall simple payback of five years or less, then performance contracting is likely to be a feasible approach.

If previous energy studies are not available, are out of date, or do not document sufficient potential, the next logical step is to evaluate lighting efficiency opportunities. Lighting improvements are relatively easy to evaluate using a spreadsheet or lighting upgrade analysis program such as *ProjectKalc*.

8. EVALUATE LIGHTING EFFICIENCY OPPORTUNITIES

A complete description of how to evaluate lighting efficiency opportunities is beyond the scope of this Guide. There are many excellent manuals addressing energy-efficient lighting. One of these is the EPA's Green Lights *Lighting Upgrade Manual.* The SCEO can provide assistance in obtaining this and other materials from the Green Lights program. These materials contain information on current energy efficient lighting technology as well as information on how to estimate the savings and costs associated with lighting upgrades.

The Green Lights program also offers lighting efficiency analysis software such as *ProjectKalc*. It allows the user to compare the energy use and light output of various lighting systems.

9. EVALUTE PROJECT SIZE AND SIMPLE PAYBACK

9-1 Is the total construction cost greater than $50,000? _____

9-2 Is the overall project simple payback less than five years? _____

9-3 If the answers to 9-1 and 9-2 are NO, can any individual measures be added or removed in order to make a project for which the answers to 9-1 and 9-2 are both YES? _____

In order for a project to be considered feasible, responses to questions 9-1 and 9-2 above must both be YES. If the project is not large enough, consider "bundling" additional buildings into the project to increase its overall size. If the simple payback is too long, individual measures with longer paybacks can be eliminated, or the Facility Owner could investigate the possibility of funding part of the project from utility energy efficiency rebates or from regular construction budgets.

Appendix B Facility Data Worksheet

Use this worksheet to document basic information needed to evaluate potential for performance contracting and describe the project to proposers. Complete a copy of the worksheet for each project site (for example, one worksheet for each elementary, middle, or high school).

1. Building List

On the attached form titled "Building List" (Table B-1) fill in the information shown below for each building included in the project.

Building Name	Small storage or utility buildings should not be included.
Year Built	If a building has additions of different ages, show the year for the portion that is largest.
Gross Floor Area Air Conditioned	In the "Gross Floor Area" column show the total building area. In the "Air Conditioned" column, indicate "Y" or "N" (for yes or no) or put in a percentage to show the percentage of the building that is air conditioned.
Notes	Use this space to describe the use of the building (for example, offices, classrooms, library, etc.) and to describe any special needs or problems relating to lighting or air conditioning.

2. Operating Schedules

Describe the facility's normal operating schedule (for example: "September through June, the facility is partially occupied from 7 a.m. to 9 a.m., and fully occupied from 9 a.m. to 5 p.m., weekdays and partially occupied on Saturday mornings. July through August, the facility is partially occupied (offices only) from 7 a.m. to 9 a.m., weekdays.")

_____
_____
_____
_____
_____
_____

3. Major Changes in Operation, Equipment, or Structures

List major changes to the facility's operation, equipment, or buildings in the last three years that may have significantly affected energy use.

_____
_____
_____
_____
_____

List planned changes to the facility's operation, equipment, or buildings. Identify any equipment scheduled for replacement. Identify any building areas scheduled for remodeling, renovation, or abandonment.

_____
_____
_____
_____
_____

4. Energy Use History

On the attached form titled "Energy Use History" (Table B-2) fill in the blanks for each electric meter or other fuel used at the facility.

5. Energy Efficiency Opportunities

In the space below, list any energy efficiency opportunities that you believe exist or would like to see evaluated.

_____
_____
_____
_____
_____

In the space below, list any energy efficiency retrofits that have already been implemented.

_____
_____
_____
_____
_____

Table B-1 Building List

Building Name	Year Built	Gross Floor Area	Air-Conditioned Yes or No?	Notes (Principal use and special concerns)

Table B-2 Energy Use History

Facility Name: _____

Electric Utility: _____
Fuel Supplier: (1) _____ (2)_____
Account Nos. _____ _____ _____
Meter Nos. _____ _____ _____

Period	Electricity Consumption			Fuel 1 Consumption Show units below (e.g., gallons, therms)		Fuel 2 Consumption Show units below (e.g., gallons, therms)	
End Date MM/DD/YY	Usage kWh	Usage kW	Cost $$	Usage	Cost $$	Usage	Cost $$
Jan							
Feb							
Mar							
Apr							
May							
Jun							
Jul							
Aug							
Sep							
Oct							
Nov							
Dec							
Total Year 1							
Jan							
Feb							
Mar							
Apr							
May							
Jun							
Jul							
Aug							
Sep							
Oct							
Nov							
Dec							
Total Year 2							

(School District Logo/Letterhead)

DATE ISSUED

REQUEST FOR QUALIFICATIONS: #001

DEADLINE FOR SUBMISSION: DATE, TIME (EST or EDT)

REQUEST FOR QUALIFICATIONS: School District Energy Efficiency Measures Project

This document is a Request for Qualifications to prospective offerors interested in an opportunity to submit a proposal for the above referenced project.

Prospective offerors who are interested may apply for consideration by submitting information on their qualifications, experience, and ability to perform the requirements under this project. A description of the services to be solicited by the resulting Request for Proposals and the General Scope of Work are contained herein.

Qualifications information must be received at the School District Procurement Office not later than 2:30 P.M. Local Time, DATE, 1998. After this date and time no further information will be accepted from prospective offerors. Respondents to this Request for Qualifications will not be publicly identified. Ranking of prospective offerors will be based solely on the qualifications and information provided.

This Request for Qualifications does not commit the School District to issue a Request for Proposals, to pay any costs incurred in the preparation of prospective offerors responses, or to procure or contract for the services described herein.

Mike Smith
Procurement Manager
Telephone Number
Fax Number

SUBMISSION OF QUALIFICATIONS

The submitting offeror is required to have printed on the envelope containing his response, the Request for Qualifications Number specified below, the Title, and the Deadline for submission.

Mark envelopes with response submitted:
RFQ No.: 001
Title: TITLE
Deadline: Date & time

Mail responses to:

School District Procurement Office
P.O. Box 00321
Columbia, S.C. 29201
Attn.: Mike Smith

Hand delivered and/or Express Mail to:

School District Procurement Office
1101 Barnes Street - Suite 601
Columbia, S.C. 29201
Attn.: Mike Smith

SUBMISSIONS BY FASCIMILE MACHINE WILL NOT BE ACCEPTED

PART I

GENERAL INFORMATION/INSTRUCTIONS

A. By submission of a response to this Request for Qualifications you are applying for consideration to receive a Request For Proposal for the services and Scope of Work described herein.

B. Prospective offerors responding to the Request for Qualifications will be evaluated based on the information provided. All submittals will be considered. Prospective offerors will be ranked from most qualified to least qualified on the basis of the information provided. Proposals will then be solicited from at least the top two (2) prospective offerors by means of a Request for Proposals. The failure of a prospective offeror to be selected to receive the Request for Proposals shall not be grounds for protest.

C. Prospective offerors are to include all information as requested herein. All pages should be returned with your response and in the format specified. Prospective offerors must submit ONLY that information which is specifically addressed in this Request for Qualifications.

D. Offerors' responses should follow the order given for REQUESTED INFORMATION in Part VI. Offerors must supply the required information listed and explain their responses with enough detail to allow for a thorough evaluation. All pages of the response must be numbered.

E. **ONE ORIGINAL AND NUMBER (#) COPIES OF YOUR RESPONSE ARE REQUIRED.**

PART II

SCOPE OF QUALIFICATIONS

School District will accept potential offeror's qualifications to Prepare Energy Performance Contracting Proposals. Potential offerors must provide ALL REQUESTED INFORMATION (PART VI).

PART III

DESCRIPTION OF SERVICES TO BE SOLICITED

Under the contract the selected ESCO will:

1. Provide comprehensive energy services for the School District's facilities, including the: (a) design, selection and installation of energy efficient equipment and systems; (b) maintenance and servicing of the installed measures; (c) securing of financing for the transaction; and, (d) energy management training of selected School District's employees.

2. Structure the terms of the School District's payment obligations for equipment and services on a Performance Contracting basis. Under a performance contract: (a) the ESCO will guarantee that equipment and services will achieve a predicted level of energy and operational savings; (b) the School District will realize equipment and services without the requirement of capital funding; and, (c) the School District will be able to meet its payment through guaranteed energy and operational savings.

PART IV

GENERAL SCOPE OF SERVICES

Buildings that will be audited for the aforementioned services listed in Part III, include:

Building:	Address:	Contact Person:	Year Built:	Sq. Footage:	Projected EEM's:
Building A	123 Anywhere St. Columbnia, SC 29201	Russ Smith (803)732-8989	1963	10565	Lighting, Envelope,HVAC
Building B	323 Somewhere Ave. Columbia, SC 29201	Russ Smith 803)732-8989	1974	15767	Lighting, Envelope,HVAC
Building C	654 Anywhere St. Columbia, SC 29201	Russ Smith 803)732-8989	1982	3434	Lighting, Envelope,HVAC

PART V

BACKGROUND

(PARAGRAPH(S) REGARDING HISTORY OF PROJECT)

This RFQ is part of a selection process leading to a performance contract for energy efficiency equipment and services between the School District ("Facility Owner") and an ESCO. Steps in the process are described below:

1. The Facility Owner issues the RFQ to prospective ESCOs.

2. The Facility Owner receives a transmittal letter and the requested number of copies of a Statement of Qualifications from each responding ESCO. The Facility Owner's Procurement Representative will distribute the copies to the Evaluation Committee for review and scoring. The Facility Owner's Project Manager may also provide copies to an outside consultant for review and analysis.

3. Each member of the Evaluation Committee will independently reach a cumulative score for a Statement of Qualifications by assigning scores to individual sections according to established criteria, and adding the section scores. Each Committee member will then independently rank responding ESCOs according to the scores of the Statement of Qualifications. The ESCO with the highest score will rank first, the ESCO with the second highest will rank second, and so on. The Evaluation Committee will recommend at least the top two ESCOs which are ranked in such order by a majority vote of the members.

4. Based on scoring and ranking, the Evaluation Committee recommends at least two ESCOs to the Facility Owner. If the Facility Owner approves the Evaluation Committee recommendation, it will instruct each selected ESCO to prepare a Proposal by issuing each ESCO a Request for Proposals (RFP). Upon issuing these RFPs, the Facility Owner's Project Manager will immediately meet with representatives of the selected ESCOs to review Facility Owner needs, Proposal Specifications, and the timetable.

****

As noted, this RFQ is part of a selection process leading to a performance contract for energy efficiency equipment and services between the School District and an ESCO. Based on scoring and ranking of the Statement of Qualifications , the Evaluation Committee will recommend at least two ESCOs to the Facility Owner. If the Facility Owner approves the Evaluation Committee recommendation, it will instruct each selected ESCO to prepare a Proposal by issuing each ESCO an RFP. Steps in the RFP process are described below:

****

1. *The ESCOs shall prepare their Proposals utilizing the format specified in the RFP within a Facility Owner designated timeframe of the date of the RFP. Upon receipt of the Proposal, the Facility Owner's Project Manager will arrange a presentation by the ESCOs to the Evaluation Committee. The Evaluation Committee will begin reviewing the Proposals following the presentation. Each member of the Evaluation Committee will independently reach a cumulative score for the submitted Proposal by assigning scores to individual sections according to established criteria and adding the section scores. Each Committee member will then independently rank the Proposal. The ESCO with the highest score will rank first, the ESCO with the second highest will rank second, and so on. Upon preliminary review, the Committee will: (a) recommend Facility Owner acceptance of the top proposer; or, (b) instruct the Facility Owner's Project Manager to negotiate specific Proposal points with the top proposer.*

2. *If instructed by the Evaluation Committee, the Facility Owner's Project Manager will negotiate Proposal points with the ESCO. Upon completion of negotiations, the Evaluation Committee will recommend that the Facility Owner either accept or reject the ESCO Proposal. The Committee will make its recommendation within a Facility Owner designated timeframe of the ESCO's original presentation of the Proposal.*

3. *A representative of the Evaluation Committee will present the Committee's recommendation to the Facility Owner. At the Facility Owner's discretion, it may request the ESCO to formally present the Proposal at that time. After hearing the Committee's recommendation, the Facility Owner may then: (a) accept the Proposal and issue a Letter of Commitment to the ESCO; (b) reject the Proposal and instruct the Evaluation Committee to negotiate with the next highest ranked ESCO that submitted a Proposal; or, (c) instruct the Committee to continue negotiations with the ESCO.*

4. *Within 90 days of the date of the Letter of Commitment, the ESCO will develop an Energy Study that includes final project costs and savings guarantees, final financial arrangements, and contractual documents. The ESCO will submit the Energy Study to the Evaluation Committee as a supporting document for its Proposal. The Committee will recommend that the Facility Owner accept the Energy Study and enter into a performance contract with the ESCO, unless: (a) the total project cost (the cumulative cost for equipment, maintenance and training) in the Energy Study is greater than 110 percent of the corresponding total project cost submitted in the ESCO's Proposal; (b) the total guaranteed energy and operational savings in the Energy Study are less than 85 percent of the savings projected by the ESCO in its Proposal; (c) the Energy Study does not show a cashflow that allows the Facility Owner to meet payment obligations (or a predetermined percentage of payment obligations)*

through guaranteed savings; (d) the ESCO has made changes in contractual provisions since the Letter of Commitment that were not authorized by the Facility Owner; (e) The ESCO's Energy Study does not comply with the terms of the RFP; or, (f) The ESCO's Energy Study does not follow the prescribed format as outlined in the RFP.

5. *Upon the recommendation of the Evaluation Committee, the Facility Owner will either accept the ESCO's Proposal and authorize a performance contract between the Facility Owner and the ESCO, or reject the Proposal. If the Facility Owner rejects the Proposal for reasons other than those stated in Section 4 (a-f) above, the Facility Owner will reimburse the ESCO for the cost of the Energy Study. All costs must be documented and in accordance with the ESCO's Proposal as accepted by the Facility Owner. The Energy Study will become the property of the Facility Owner to use as it sees fit.*

PART VI

REQUESTED INFORMATION

Prospective offerors will be evaluated and ranked based solely on the information submitted in their response to this Request for Qualifications. Prospective offerors must only submit information on their qualifications, experience, and ability to perform the requirements of this prospective contract. Any additional information WILL NOT be considered.

The maximum number of pages for the qualifications, experience, and ability to perform response is fifty. It must be divided into three sections and each section must be titled and presented in the following prescribed order:

I. Qualifications

(1) ESCO Qualifications *(Suggested Pages:10)*. Describe the ESCO's: (a) corporate capabilities in energy management and Performance Contracting; (b) number of years the ESCO has been involved in delivering energy efficiency equipment and services; (c) the number and dollar value of performance contracts; (d) range of energy management services offered; and, (e) the financial condition of the firm. Include a copy of the ESCO's most recent annual report and financial statement in the appendix.

(2) Staff Qualifications *(Suggested Pages: 10)*. For purposes of responding to this section, consider this Performance Contracting project as having three phases: Phase I, Development, which includes conducting surveys, arranging financing, securing sub-contractors (if needed), and preparing the Proposal; Phase II, Project Installation, which includes installing and commissioning equipment; and Phase III, Operations, which includes reviewing energy consumption, identifying operational needs, and responding to problems.

For each phase, identify one or two people who will have a direct, hands-on role in delivering energy efficiency equipment and services. In addition, identify one person who will have primary responsibility for coordinating the project through all phases and ensuring that the ESCO meets its responsibilities to the Facility Owner under a performance contract. For each person (maximum seven), please state as concisely as possible: (a) his/her name, position, years with the ESCO, years in energy management, relevant education and training, and related licenses; (b) the tasks that the person will perform for the project and the percentage of his/her time the person will spend on the project during that specific phase;

and, (c) a list of up to five energy management projects where the person has performed similar tasks.

II. Experience

(1) ESCO Experience *(Suggested Pages: 10*). Provide a brief description of five ESCO projects in school, university or other institutional buildings. The projects should demonstrate the ESCO's experience in providing equipment and services similar to what the Facility Owner is requesting. The projects should be within a recommended 400 mile radius of ********, South Carolina. The projects must have been installed and operating for at least one year. At least one of the projects must have been provided on a Performance Contracting basis. For each project, state: (a) client name and address, contact person name, and telephone number; (b) project name and total cost; (c) project description, including number and size of buildings, equipment installed, and services provided; (d) annual energy savings resulting from the project, in terms of total dollars, cents per square foot, and percentage; and, (e) sources and levels of operational savings.

III. Ability to Perform

(1) Project Management *(Suggested Pages: 10*). Describe, step-by-step, the process the ESCO will use to implement the Performance Contracting project, from surveys and Proposal preparation through installation, operation, and maintenance. The description should be clear, concise, and follow a logical sequence; i.e. Step 1 (brief activity description), Step 2 (brief activity description),.....Step N (brief activity description). In the step-by-step description, include information on the line of communication within the ESCO management structure, and between the ESCO and the Facility Owner. Also, within the step-by-step process, note the procedures for identifying problems, assuring quality, and maintaining the implementation schedule.

(2) Project Responsiveness *(Suggested Pages: 10*). Describe, in specific terms: (a) how the ESCO will identify and correct operations and maintenance problems over the course of the performance contract; and, (b) how the ESCO will respond to equipment failures or other emergencies. This description will be strengthened by specific, verifiable examples of how the ESCO has responded to problems and emergencies in the **********, South Carolina area.

(3) Training Responsiveness *(Suggested Page: 10 points*). Describe, in specific terms: (a) how the ESCO will determine the training needs for a Facility Owner's maintenance department; and, (b) how the ESCO can provide training, both on-site and off-site, to maintenance staff. The description will be strengthened by specific, verifiable examples of how the ESCO has trained maintenance personnel with similar Facility Owners and other organizations in the **********, South Carolina area.

**** The Offeror's Annual Report and Financial Statement must be submitted as an appendix

NOTE: REQUESTED INFORMATION MAY BE CUSTOMIZED TO MEET THE NEEDS OF A VARIETY OF REQUESTS…

School District Procurement Office
P.O. Box 00321
Columbia, S.C. 29201

BID DOCUMENT ENCLOSED

(School District Logo/Letterhead)

DATE, 1998

Proposal Notice No.: #001

Opening Date And Time: DATE, TIME (EST or EDT)

Request For Proposal: School District Energy Conservation Measures Project

You are invited to submit proposals in accordance with the requirements of this solicitation which are contained herein.

Proposals are to be received at the School District Procurement Office not later than 2:30 P.M. local time, **Date, 1998**, at which time respondents to this request will be publicly identified. Due to the possibility of negotiation with any offeror submitting a proposal which appears to be eligible for contract award pursuant to the selection criteria set forth in this Request for Proposal, prices will not be divulged at time of opening.

Proposals submitted must show the above proposal number. The School District assumes no responsibility for unmarked or incorrectly marked envelopes being considered for award.

The solicitation does not commit the School District to award a contract, to pay any costs incurred in the preparation of a proposal, or to procure or contract for the articles of goods or services. The School District reserves the right to accept or reject any or all proposals received as a result of this request, or to cancel in part or in its entirety this proposal if it is in the best interest of the School District to do so.

NOTE: SEE PAGE TWO (2) FOR PRE-PROPOSAL CONFERENCE/SUBMISSION OF QUESTIONS.

Mike Smith
Procurement Manager
803/211-0000

PRE-PROPOSAL CONFERENCE

There will be a pre-proposal conference at _____.M. on ___ at the ___. Questions concerning the contents of the project and procedural aspects of the RFP will be answered at this time. All offerors are encouraged to attend.

Any questions or requests for information must be submitted in writing prior to the adjournment of the Pre-Proposal Conference. Questions may be mailed or faxed prior to the conference. Any **written** questions received prior to the conference or during the conference will be responded to in the form of a written amendment to the RFP and mailed to all potential offerors after the conference. Once the Conference is adjourned, no further questions will be addressed.

****

MANDATORY PRE-PROPOSAL CONFERENCE

There will be a **mandatory** pre-proposal conference at __.M on ___ at the ___. Questions concerning the contents of the project and procedural aspects of the RFP will be answered at this time.

NOTE: Attendance at the pre-proposal conference is a prerequisite to submitting a proposal.

Any questions or requests for information must be submitted in writing prior to the adjournment of the Pre-Proposal Conference. Questions may be mailed or faxed prior to the conference. Any **written** questions received prior to the conference or during the conference will be responded to in the form of a written amendment to the RFP and mailed to all potential offerors after the conference. Any questions not answered during the conference will also be responded to in writing and mailed to all potential offerors. Once the Conference is adjourned, no further questions will be addressed.

****

SUBMISSION OF QUESTIONS

All questions or request for information must be submitted as indicated below. Questions or requests for information must be submitted in writing and received by _____. After this date no further questions will be addressed. After all responses have been received, a written response will be mailed to all potential offerors.

****

THE ABOVE OPTIONAL SECTIONS MAY BE USED FOR "PRE-PROPOSAL CONFERENCE", "MANDATORY PRE-PROPOSAL CONFERENCE" OR "SUBMISSION OF QUESTIONS".

Mark envelopes on questions mailed: **QUESTIONS**
Title: Procurement Manager
Attn. : Mike Smith

SEND QUESTIONS/PROPOSALS TO:

MAIL QUESTIONS:
School District Procurement Office
PO Box 00321
Columbia, SC 29201
Attn.: Mike Smith

HAND DELIVER/EXPRESS MAIL:
School District Procurement Office
1101 Barnes Street - Suite 601
Columbia, SC 29201
Attn: Mike Smith

QUESTIONS MAY BE FAXED TO:
803-211-0000

EMAIL:
MSmith@sd1.scscsc.sc.us

NOTE: FAILURE TO FURNISH YOUR F.E.I.N. OR S.S.N. WILL RESULT IN THE DELAY OF AN AWARD (SEE SPACE BELOW).

PART I

GENERAL INFORMATION

A. Proposals will be considered as specified herein or attached hereto under the terms and conditions of this proposal.

B. Proposal must be made in the official name of the firm or individual under which business is conducted (showing official business address) and must be signed in ink by a person duly authorized to legally bind the person, partnership, company, or corporation submitting the proposal.

C. Offerors are to include all applicable requested information and are encouraged to include any additional information they wish to be considered.

D. ONE (1) ORIGINAL AND NUMBER (#) COPIES OF YOUR PROPOSAL ARE REQUIRED.

E. By submission of your signed proposal you are certifying that if awarded a contract in excess of $50,000 under this solicitation, you will comply with Title 44, Code of Laws of South Carolina, 1976, relating to health, by adding Chapter 107, The Drug-Free Workplace Act.

F. Sealed proposals will be received by the School District Procurement Office until 2:30 P.M. on the opening date.

G. Notice of intended award of contract will be posted at the location listed below:

School District Procurement Office
1101 Barnes Street - Suite 601
Columbia, SC 29201

ALL MAIL IS PICKED UP ONCE DAILY AT 8:00 A.M.

PROPOSALS SUBMITTED VIA FACSIMILE MACHINE OR BUYER'S EMAIL ARE UNACCEPTABLE.

The submitting offeror is required to have printed on the envelope or wrapping containing his proposal, the Proposal Notice Number specified in this RFP and the proposal opening date.

Offerors who desire to receive a copy of the Statement of award must include a self-addressed stamped envelope.

F.E.I.N: _____
or
S.S.N.: _____

PART II

SCOPE OF PROPOSAL

It is the intent of the School District, Procurement Office to solicit proposals to/for The ABC Energy Consulting, Inc. for an Energy Study Report of facilities at School District in accordance with all requirements stated herein.

All proposals must be complete and carefully worded and must convey all of the information requested in Part VII, PROPOSAL CONTENTS in order to be considered responsive. If the proposal fails to conform to the essential requirements of the RFP, the School District and the School District alone will be the judge as to whether that variance is significant enough to consider the RFP non-responsive and therefore not considered for award.

Unless stated otherwise herein, the basic and governing language of the contract resulting from this solicitation shall be comprised of the Request for Proposal documents, including any attachments and amendments, and the successful offeror's signed proposal. In the event of a conflict between the two documents, the RFP shall govern.

PART III

INTRODUCTION

A. Purpose of RFP

The purpose of this RFP process is to select an Energy Service Company (ESCOs) to prepare a detailed Energy Study of energy efficiency opportunities at the School District buildings described below. Said Energy Study may become the basis for an energy performance contract between the School District and the ESCO.

B. RFP Selection Process

This RFP is part of a selection process leading to a performance contract for energy efficiency equipment and services between the School District ("Facility Owner") and an ESCO. Steps in the process are described below:

1. The ESCOs shall prepare their Proposals utilizing the format specified in the RFP within a Facility Owner designated timeframe of the date of the RFP. Upon receipt of the Proposal, the Facility Owner's Project Manager will arrange a presentation by the ESCOs to the Evaluation Committee. The Evaluation Committee will begin reviewing the Proposals following the presentation. Each member of the Evaluation Committee will independently reach a cumulative score for the submitted Proposal by assigning scores to individual sections according to established criteria and adding the section scores. Each Committee member will then independently rank the Proposal. The ESCO with the highest score will rank first, the ESCO with the second highest will rank second, and so on. Upon preliminary review, the Committee will: (a) recommend Facility Owner

acceptance of the top proposer; or, (b) instruct the Facility Owner's Project Manager to negotiate specific Proposal points with the top proposer.

2. If instructed by the Evaluation Committee, the Facility Owner's Project Manager will negotiate Proposal points with the ESCO. Upon completion of negotiations, the Evaluation Committee will recommend that the Facility Owner either accept or reject the ESCO Proposal. The Committee will make its recommendation within a Facility Owner designated timeframe of the ESCO's original presentation of the Proposal.

3. A representative of the Evaluation Committee will present the Committee's recommendation to the Facility Owner. At the Facility Owner's discretion, it may request the ESCO to formally present the Proposal at that time. After hearing the Committee's recommendation, the Facility Owner may then: (a) accept the Proposal and issue a Letter of Commitment to the ESCO; (b) reject the Proposal and instruct the Evaluation Committee to negotiate with the next highest ranked ESCO that submitted a Proposal; or, (c) instruct the Committee to continue negotiations with the ESCO.

4. Within 90 days of the date of the Letter of Commitment, the ESCO will develop an Energy Study that includes final project costs and savings guarantees, final financial arrangements, and contractual documents. The ESCO will submit the Energy Study to the Evaluation Committee as a supporting document for its Proposal. The Committee will recommend that the Facility Owner accept the Energy Study and enter into a performance contract with the ESCO, unless: (a) the total project cost (the cumulative cost for equipment, maintenance and training) in the Energy Study is greater than 110 percent of the corresponding total project cost submitted in the ESCO's Proposal; (b) the total guaranteed energy and operational savings in the Energy Study are less than 85 percent of the savings projected by the ESCO in its Proposal; (c) the Energy Study does not show a cashflow that allows the Facility Owner to meet payment obligations (or a predetermined percentage of payment obligations) through guaranteed savings; (d) the ESCO has made changes in contractual provisions since the Letter of Commitment that were not authorized by the Facility Owner; (e) The ESCO's Energy Study does not comply with the terms of the RFP; or, (f) The ESCO's Energy Study does not follow the prescribed format as outlined in the RFP.

5. Upon the recommendation of the Evaluation Committee, the Facility Owner will either accept the ESCO's Proposal and authorize a performance contract between the Facility Owner and the ESCO, or reject the Proposal. If the Facility Owner rejects the Proposal for reasons other than those stated in Section 4 (a-f) above, the Facility Owner will reimburse the ESCO for the cost of the Energy Study. All costs must be documented and in accordance with the ESCO's Proposal as accepted by the Facility Owner. The Energy Study will become the property of the Facility Owner to use as it sees fit.

PART IV

SCOPE OF WORK

Under the energy performance contract the selected ESCO will:

1. Provide comprehensive energy services at the School District's facility(ies), including the: (a) design, selection and installation of energy efficient equipment and systems; (b) maintenance and servicing of the installed measures; (c) securing of financing for the transaction; and, (d) energy management training of selected Facility Owner's employees.

2. Structure the terms of the School District's payment obligations for equipment and services on a Performance Contracting basis. Under a performance contract: (a) the ESCO will guarantee that equipment and services will achieve a predicted level of energy and operational savings; (b) the School District will realize equipment and services without the requirement of capital funding; and, (c) the School District will be able to meet its payment obligations (or a predetermined percentage of payment obligations) through guaranteed energy and operational savings.

The following buildings will be audited for the aforementioned services:

Building:	Address:	Contact Person:	Year Built:	Sq. Footage:	Projected EEM's:
Building A	123 Anywhere St. Columbia, SC 29201	Russ Smith (803)732-8989	1963	10,565	Lighting, Envelope, HVAC
Building B	323 Somewhere Ave. Columbia, SC 29201	Russ Smith 803)732-8989	1974	15,767	Lighting, Envelope, HVAC
Building C	654 Anywhere St. Columbia, SC 29201	Russ Smith 803)732-8989	1982	3,434	Lighting, Envelope, HVAC

PART V

QUALIFICATIONS

The offeror must demonstrate that he or she possesses the following qualifications:

Not applicable, offerors have demonstrated in Statement of Qualifications.

PART VI

BUDGET

Maximum budget allocated to this project is $_____for implementation of EEM's.

PART VII

PROPOSAL CONTENTS

To be considered for award all proposals must include, as a minimum, the following information. **All information should be presented in the listed order:**

1. ESCO and Subcontractor Information. This section must include: (a) any modifications to ESCO Qualifications and Staff Qualifications provided by the ESCO in its Statement of Qualifications; and, (b) subcontractor information, including name, address, contact person, telephone number, area of responsibility, and brief description of experience.

2. Project Description. This section must include: (a) a description of the Energy Study that the ESCO will perform (see sample format of Energy Study as Appendix C2, Attachment B); (b) a list, description, and justification of energy efficiency measures to be installed; (c) the timetable for implementing the project; and, (d) standards of facility comfort, including heating and cooling season temperatures, hot water temperatures, ventilation levels, and lighting levels. Descriptions and justifications of the energy efficiency measures should be sufficiently clear and detailed to allow the Facility Owner to know the specific equipment, size and quantity that will be installed in each building. Descriptions such as "Lighting Improvements" are not acceptable.

3. Maintenance Services and Warranties. This section must include: (a) a list of equipment that will be covered by manufacturer warranties and ESCO maintenance services; (b) the specific manufacturer warranty for each piece of equipment; (c) the ESCO maintenance coverage and services for each piece of equipment; and, (d) the method that the ESCO will use for both preventive maintenance to avoid operational problems and emergency maintenance in the event of equipment failure.

4. Training Services. This section must include: (a) a list of Facility Owner personnel (or their positions) that will receive training; (b) a specific description of the training that each will receive, including training source, site, location, and hours; (c) when the training will occur during the course of the performance contract; and, (d) the expected capability of each person following training.

5. Project Cost Summary. This section must include the following project cost information: (a) cost of the building automation system; (b) cost of HVAC and related equipment; (c) cost of lighting retrofits; (d) cost of any other equipment; (e) cost of proposed training, per training component and total (including any travel costs); (f) cost of proposed maintenance services, annual and total; and, (g) cost of Energy Study. Detailed cost information is needed to ensure public accountability for equipment and services purchased by the Facility Owner.

6. Project Financing. This section must include: (a) a statement of the dollar amount that will be financed; (b) a description of the financing method that is being proposed; and, (c) a statement of the source of financing and anticipated interest rate.

7. Guaranteed Energy Savings. This section must include for each individual building and for the total project: (a) the current annual kwh and ccf consumption, electrical demand level, total energy cost, and cost per square foot; (b) the annual kwh and ccf consumption, electrical demand level, total energy cost, and cost per square foot after project implementation (at existing rates); and, (c) the guaranteed reduction in kwh consumption, kw demand, ccf consumption, and energy costs per month and annually.

8. Operational Savings. This section must include: (a) a description of operational savings resulting from the project; (b) a description of the rationale for each operational saving(s) item listed; and, (c) an explanation of how operational savings are guaranteed.

9. Cash Flow Statements. This section must include the following cash flow statements: (a) a statement using energy cost savings only, with existing energy rates and estimated interest rate; (b) a statement using both energy and operational cost savings, with existing energy rates and operational costs, and estimated interest rate; and, (c) a statement using both energy and operational cost savings, with a reasonable ESCO estimate of energy cost increases, operational cost increases, and interest rate. Each cash flow statement should specifically define all assumptions regarding energy costs, escalation rates, and interest rate.

10. Project Summary. This section must include the following information: (a) total project cost; (b) amount financed; (c) annual and total energy consumption and energy cost guarantees; and, (d) a brief statement of guarantees and other actions taken by the ESCO to minimize Facility Owner risk related to this project.

11. Official ESCO Statements. This section must include the following statements, signed by an ESCO representative authorized to enter into contractual agreements: (a) statement that the ESCO will finalize the Proposal in accordance with Part III, B-5; and, (b) statement that the ESCO has read and agrees to the terms and conditions and the contract language set forth in the RFP and in the attachments. Any terms or wording that the ESCO does not agree to must be specifically noted in the statement, along with a brief explanation and proposed alternative language. The ESCO should note that any disagreement over the Proposal or contractual terms which cannot be reconciled to the Facility Owner's satisfaction will be grounds for ESCO disqualification.

12. Additional Information. This section must include proof that the ESCO meets bonding and insurance requirements of the project.

PART VIII

AWARD CRITERIA

Proposal will be evaluated by a review panel on the basis of the following criteria listed in order of importance:

A Proposal has a total value of 100 points scored with the following point system: (A) Technical Approach, thirty points; (B) Management Plan, thirty points; (C) Financial Benefits, twenty five points; and (D) Cost, fifteen points.

A. Technical Approach (Possible Score: 30 Points)

This factor gives credit to Proposals that demonstrate a superior technical approach to achieving energy cost savings. In evaluating this factor, evaluators will look for Proposals that:

1) Clearly and specifically describe the proposed energy saving measures, including what existing systems will be modified and how the proposed modification will achieve energy savings;
2) Demonstrate knowledge and understanding of the existing systems and operating constraints and propose appropriate measures;
3) Employ technologies that have been successfully implemented before by the proposer and for which local maintenance, repair, and training support are readily available; and,
4) Clearly demonstrate the quality of the energy savings measurement methodology, including the method to establish baseline usage. Because total payments to the winning proposer must be demonstrated to be less than measured energy cost savings, the proposed method to measure savings must be clearly and completely described. Savings must be verified through measurements made over the term of the performance contract.

Based on the evaluation of technical approach, each proposer is assigned a score on a scale from 1 to 10 (with 10 as the best and 1 the worst score).

Table C2-1: Technical Approach (Possible Score: 30 Points)

Proposer	[1] Raw Score (1 to 10)	[2] Weighted Score [1] x 10%	[3] Points [2] x 30
1) 2) 3)			

B. Management Plan (Possible Score: 30 Points)

This plan should demonstrate the proposer's understanding of Performance Contracting and energy efficiency construction projects in general and the constraints of the participating facility in particular. In evaluating management plans, evaluators will consider:

1) Clear assignment of responsibility for each project task to a specific individual;

2) Comprehensiveness of management, maintenance, and monitoring services offered;

3) Methods to ensure minimum disruption of Facility Owner operations;

4) Ability to coordinate project construction with local utilities, subcontractors, suppliers, and facility personnel;

5) Provisions for response and repair in event of emergency; and

6) Flexibility to modify the proposal and allow for facility staff input to equipment design, selection, operation, and maintenance on an ongoing basis.

Based on the evaluation of the management plans, each proposer is assigned a score on a scale from 1 to 10 (with 10 as the best and 1 the worst score).

Table C2-2: Management Plan (Possible: 30 Points)

Proposer	[1] Raw Score (1 to 10)	[2] Weighted Score [1] x 10%	[3] Points [2] x 30
1) 2) 3)			

C. Financial Benefits (Possible Score: 25 Points)

The Facility Owner will prefer Proposals that responsibly maximize financial benefits. In evaluating financial benefits, evaluators will consider:

1) The projected net financial benefits to the Facility Owner over the life of the measures.

2) The gross energy savings over the agreement term;

3) Terms of the guarantee of the project's energy savings and/or financial performance;

4) Proposed methods to minimize project risks, including contract terms to accommodate changes in building use, early termination, or other needs of the facility; and,

5) Comparative cost of financing (i.e. interest rate).

Based on the evaluation of the financial benefits, each proposer is assigned a score on a scale from 1 to 10 (with 10 as the best and 1 the worst score).

Table C2-3: Financial Benefits (Possible Score: 25 Points)

Proposer	[1] Raw Score (1 to 10)	[2] Weighted Score [1] x 10%	[3] Points [2] x 25
1) 2) 3)			

D. Cost (Possible Score: 15 Points)

The Facility Owner will prefer Proposals that provide services at the lowest possible cost. The points allocated to higher cost Proposals will be equal to the lowest cost multiplied by the maximum points available, divided by the higher Proposal cost. If necessary to achieve a consistent basis to compare Proposals, the Facility Owner may apply its own assumptions or conventions for the purpose of estimating Proposal prices.

As an example, assume that Acme ESCO and Superior Services submit Proposals on a project with a hypothetical construction cost of $1,000,000. The Budgeted Amount in Part VI is used to allow a common basis for cost comparison. Superior Services' cost is $1,600,000 and Acme ESCO's is $2,000,000. Superior Services receives the maximum points available because they proposed the lowest cost. Acme ESCO's score is calculated by dividing $1,600,000 by $2,000,000, multiplied by the maximum points available.

Based on the evaluation of the Cost, each proposer is assigned a score on a scale from 1 to 10 (with 10 as the best and 1 the worst score).

Table C2-4: Cost (Possible Score: 15 Points)

Proposer	[1] Raw Score (1 to 10)	[2] Weighted Score [1] x 10%	[3] Points [2] x 15
1) Acme ESCO	*8*	*0.8*	*12*
2) Superior Services ESCO	*10*	*1.0*	*15*
3)			

Table C2-5: Summary Scoresheet

Proposer	Technical Approach (max. 30)	Mgmt. Plan (max. 30)	Financial Benefits (max. 25)	Cost (max. 15)	Total (max. 100)
1) 2) 3)					

After scoring all submitted Proposals, each evaluator determines his or her rank (first, second, third,) for each Proposal.

SCHOOL DISTRICT PROCUREMENT OFFICE
1101 BARNES ST. SUITE 601
COLUMBIA S.C. 29201

RFP Attachments

Attachment A: **Sample Letter of Commitment**
Attachment B: **Form of Energy Study Report**
Attachment C: **Sample Performance Contract**

Attachment A

Sample Letter of Commitment

June 1, 1998

Mr. Frederick D. Mueller
President
ABC Energy Consulting Co., Inc.
2700 Devine Street
Columbia, SC 29205

RE: **Letter of Commitment for Energy Study Report**

Dear Mr. Mueller:

We are pleased to advise you that the School District (hereinafter referred to as "Facility Owner") has approved ABC Energy Consulting Co., Inc.'s (hereinafter referred to as "Contractor") proposal to prepare a detailed Energy Study Report of energy efficiency opportunities at the Facility Owner buildings (hereinafter referred to collectively as the "Facility") described in the RFP dated December 1, 1997. The Energy Study Report may become the basis for an energy performance contract between the Facility Owner and the Contractor.

The terms and conditions of the performance of the Energy Study Report are as follows:

(1) Energy Study Report

a. Contractor shall perform a detailed Energy Study of the Facility at its sole expense. The Energy Study Report shall identify all feasible energy efficiency, load management, and renewable resource options with benefits exceeding costs over the contract term. The Energy Study Report shall also address the following options specifically identified by the Facility Owner: _____.

The study shall document existing conditions, including building physical conditions; hours of use or occupancy; area of conditioned space; inventory of energy consuming equipment or systems; and energy consuming equipment operating conditions or loads. The Energy Study Report shall document an Energy Baseline and proposed methods to measure and verify Energy Savings. Contractor shall furnish a written report of its findings including all of the information listed in the form attached as Attachment B.

b. Within 90 days of the effective executed date of this Letter of Commitment, the Contractor shall submit the Energy Study Report to the Facility Owner for review and acceptance prior to the execution of a contract and installation of any EEMs. Facility Owner acceptance of the Energy Study Report establishes mutual agreement on the

equipment to be installed, energy baseline, and other terms of the Sample Contract included as Attachment C. Agreement on the content and form of the Energy Study Report will be evidenced by executing the attached Energy Study Report acceptance form, whereupon the Energy Study Report will be incorporated into the Sample Contract as Appendix 2.

(2) Energy Study Fee

a. If the Facility Owner elects not to proceed after accepting the Contractor's Energy Study Report, or if the Facility Owner and the Contractor cannot agree on the contents or manner of incorporation of the Energy Study Report within ninety (90) days after submission of the Energy Study Report, then this Letter of Commitment shall terminate and the Facility Owner shall pay Contractor the sum of _____ ($_____._____) as compensation for the preparation of the Energy Study Report, unless:

(1) The Contractor's Energy Study Report does not follow the prescribed Energy Savings Report format attached as Attachment B; or,

(2) The Contractor's Energy Study Report does not comply with the terms of the Request for Proposals in any material respect; or,

(3) The Contractor has made changes in contractual provisions since the Request for Proposals that were not authorized by the Facility Owner; or,

(4) The Energy Study does not show a cashflow that allows the Facility Owner to meet payment obligations (or a predetermined percentage of payment obligations) through guaranteed savings; or ,

(5) The total guaranteed energy and operational savings in the Energy Study are less than 85 percent of the savings projected by the ESCO in its Proposal; or,

(6) The total project cost (the cumulative cost for equipment, maintenance, and training) in the Energy Study is greater than 110 percent of the corresponding total project cost submitted in the ESCO's Proposal.

Under these circumstances, the Facility Owner shall have no obligation to reimburse Contractor for the cost of preparing the Energy Study Report and may use any information contained in the report or implement any of its recommendations with no cost or obligation to Contractor.

If the foregoing is satisfactory, please indicate your acceptance by executing and returning to us the original Letter of Commitment, keeping the copy for your files. This Letter of Commitment will expire on February 1, 1998, unless extended in writing by the Facility Owner.

Mr. Mueller, we certainly appreciate the opportunity of extending this Letter of Commitment to you. It has been a pleasure working with you.

The Facility Owner

_____

By:
Title:

ACCCEPTED AND ACKNOWLEDGED BY:

ABC Energy Consulting Co., Inc.

_____ _____

By: Mr. Frederick D. Mueller **Date**
Title: President

Attachment B

Form Of Energy Study Report

The Contractor shall perform a detailed study of the Facility and document its findings in a report including, at a minimum, all of the following information:

1. Cover

   The cover page should provide the following information:
   - The words "Energy study for (the Facility's name)"
   - Name(s) and address(es) of the building(s) analyzed in the study
   - Name of the firm producing study
   - Date

2. Table of Contents

   Must be complete with page numbers and descriptive title for each section, table, exhibit, attachment, etc. Tables, charts, attachments, and exhibits should be listed separately by number, title, and page number.

3. Page Numbers and Revisions

   Each page should be numbered and dated. Should revisions be requested, a listing of original pages and replacement pages should be provided. Each revised page should indicate at bottom right corner "Revised-date."

4. Executive Summary

   A short (one or two page) narrative summary of the project, including discussion of the project's energy savings and financing.

   a. The following tables must be included:
      1) A summary of EEM measures for the project (Table B-1; B-1X for each EEM);
      2) Maintenance services provided by equipment covered, scope, frequency (Table B-2);
      3) A summary of the price formula (Table B-3);
      4) A summary of the project cost (Table B-4);
      5) A cost savings calculation (Table B-5); and,
      6) A payment schedule (Table B-6)

   b. Savings guarantee. The following statement shall be included:
      "The Contractor guarantees that in each year of the Term following Substantial Completion, the School District will realize energy savings of at least _____kWh. At current rates, these energy savings have a value of _____Dollars ($_____)."

5. Existing Conditions

Document the existing conditions of the Facility, including the following information itemized for each building in the facility:

a) Building physical condition;
b) Hours of use or occupancy;
c) Area of conditioned space;
d) Area of unconditioned space;
e) Inventory of energy consuming equipment or systems;
f) Energy consuming equipment operating conditions and loads;
g) Standards of service and comfort observed (e.g. light levels, ventilation, and temperatures); and,
h) Current practices that unnecessarily increase energy use or impact baseline.

6. Energy Efficiency Measures (EEM)

Provide a narrative description of each proposed cost effective energy efficiency measure to be installed including:

a) The proposed upgrade, replacement, operational change, or maintenance requirement ;
b) The interface between the proposed EEM and remaining School District equipment;
c) The impact on remaining School District equipment (changes in load, run time, etc.);
d) Any impact on standards of service and comfort;
e) A completed Table B-1 for all measures; and,
f) A description of EEM's analyzed but disqualified under cost effectiveness criteria.

General Information

- EEM's should be presented in the order that interactions are considered;
- Energy Management System (EMS) savings must not be calculated as a percentage of total energy use. Each process controlled by the EMS should be analyzed separately, and savings associated with that process improvement calculated;
- Maintenance measures should be analyzed for savings in the same manner as other EEMs; and,
- An EEM summary sheet must be provided for each measure (See Table B-1X).

7. Energy Savings Proposed

Provide a detailed energy analysis for each EEM proposed, documenting the estimated annual energy savings. Document assumptions on current and proposed equipment operating conditions and energy savings calculations.

Computer Models

When computer modeling is used, the model and each set of results must be properly documented. Minimum documentation required is:

- Name of the program;
- Description of the calculations the program performs; and,
- Table showing the model's calculation of the building's energy consumption for each month of the base year, and actual consumption for those months.

8. Facility Support Required

For each EEM proposed, identify any necessary utility interruptions and any other facility support that may be required during installation.

9. EEM Installation Schedule

For each EEM provide a proposed implementation schedule. Include the following milestones:

a) Design completed;
b) Permits;
c) Submittals (plans and specifications);
d) Equipment/Material acquisition;
e) Mobilization;
f) Installation;
g) Clean up;
h) Startup/Testing;
i) Final inspection and Notice of Substantial Completion;
j) Post installation submittals; and,
k) Training.

10. Hazardous Waste Disposal Plan

Provide a descriptive hazardous waste disposal plan for the project.

11. Energy Baseline and Savings Measurement

The Contractor shall establish and document:

a) An Energy Baseline, including data, methodology, and variables used to compute it;
b) The methods used to measure energy savings and energy cost savings for each energy type after proposed EEMs have been installed;
c) The method it will use to verify installed EEM compliance with requirements of the Sample Contract's General Provision Number 16 (Standards of Service and Comfort);
d) The method of determining energy savings and compliance with Standards of Service and Comfort annually throughout the contract term; and,
e) If a computer program or programs will be used to establish the baseline, modify the baseline, or measure savings, furnish the name of the program, the name, address, and phone number of the program developer or supplier, and descriptive literature. The School District may require contractor to furnish a properly licensed copy of the program(s) to the School District for its use in administering the contract at no cost to the School District.

12. Description of Maintenance Services and Training

Provide a complete description of the maintenance services Contractor will provide, including schedules. Summarize on Table B-2. (Note: refer to Sample Contract's Article 3.4 and General Provision Numbers 8 and 10.). Describe any training being provided.

13. Pricing and Project Financing

Contractor shall complete Tables B-3, B-4, B-5, and B-6. This includes a payment schedule with termination value for each year of the contract.

14. Calculations

a) All calculations must be complete and easy to follow. Spreadsheet formats must include a description of the assumptions and calculations;
b) Units must be indicated and only so many significant digits as the accuracy of the calculation warrants included;
c) Weather data source should be described; and,
d) Calculation details and supporting documentation shall be placed in an Appendix.

15. Utility Rebates

If utility rebates will be included as part of the energy study recommendations, it may be necessary for the Contractor to develop a system which reports annual savings by meter and/or account number. Contractors should contact the local utility for further information.

Table B-1 Energy Efficiency Measure Summary

Company Name: _____
Facility Name: _____
(Aggregates data from summary sheets)

EEM No.	Energy Efficiency Measure (EEM)	Electricity Savings (kWh/yr)	Peak Demand Reduction (kW)	Fuel Savings (include units)	Energy Cost Savings ($/yr)	Estimated Measure Cost ($) from Table B-1X	Estimated Life of Measure (years)	Refer to Page(s)
	TOTALS							

Table B-1X

Summary Sheet for EEM Number _____

Building: _____
Name of EEM: _____

1. DESCRIPTION (include quantities, types, sizes, locations, etc.)
   A Existing Conditions: _____
   _____
   _____
   _____

   B. Proposed Conditions with EEM: _____
   _____
   _____
   _____

2. NET FIRST YEAR ENERGY SAVINGS

Fuel Type (electric, gas, oil)	Fuel Units (kWh, Therms, KW, gallons)	First Year Fuel Savings (kWh, Therms, KW, gallons)	Unit Cost for the Fuel	Cost Savings
TOTALS				

3. Cost Estimate Summary of Measure

Materials	$_____
Labor	_____
Contingency	_____
Other(Specify)	_____
Total	$_____

4. Expected useful life: _____years.

5. The measure interacts with EEM or MM No(s) _____

6. The measure impacts EEM or MM No(s) _____

7. Impact on standards of service and comfort.

Table No. B-2
Maintenance Services (Contractor-installed, existing Facility)

Building (if appropriate): _____

MM No.	EQUIPMENT	SCOPE	FREQUENCY

Table B-3 Price Formula

B-3.1 Energy Study Fee	$_____.___	
Estimated Cost to Prepare Energy Study (if different from price above)	$_____.___	
B-3.2 Design Services	$_____.___or	_____% of Construction Cost
B-3.3 Construction/ Project Management Services	$_____.___or	_____% of Construction Cost
B-3.4 General Contractor Overhead and Profit	Overhead Profit	_____% of Construction Cost _____% of Construction Cost
B-3.5 Commissioning and Initial Training	$_____.___or	_____% of Construction Cost
B-3.6 Interest During Construction	$_____.___ at	_____%
B-3.7 Bond Fees	$_____.___or	_____% of Construction Cost
B-3.8 Miscellaneous Fees and Permits	$_____.___or	_____% of Construction Cost
B-3.9 Term Financing Interest Rate		_____% of Principal (APR)
B-3.10 Monitoring, Verification, and Savings Guarantee	$_____.___or	_____% of Energy Savings
B-3.11 Maintenance Services Overhead and Profit	Overhead Profit	_____% of Maintenance Cost _____% of Maintenance Cost

Table B-4 Calculation of Not To Exceed Project Cost

Not to Exceed (NTE) Installed Measure Cost	_____	From Table B-1 Energy Study
Energy Study Cost	_____	From Table B-3.1
Design Services	_____	From Table B-3.2
Construction/Project Management Services	_____	From Table B-3.3
General Contractor Overhead and Profit	_____	From Table B-3.4
Commissioning and Initial Training	_____	From Table B-3.5
Interest During Construction	_____	From Table B-3.6
Bond Fees	_____	From Table B-3.7
Miscellaneous Fees and Permits	_____	From Table B-3.8
Project Development Fee	_____	2% of Installed Measure Cost
Other	_____	Specify
Pre-Tax Subtotal	_____	
SC General Excise Tax	_____	
Other Taxes	_____	
Total (NTE) Project	_____	

Table B-5 Calculation of Cost Savings

Year	Energy Cost Savings {A}	Maintenance Cost Savings {B}	Other Cost Savings {C}	Gross Savings {D}={A}+{B}+{C}	Total Payments (from Table B-6) {E}	Net Savings {F}={D}-{E}
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
TOTAL						

Notes: Include utility rebates in "Other Cost Savings" if they will be included as part of the project.

Table B-6 Payment Schedule and Termination Value

		Payment Summary			
Year	**Contract Payments {A}**	**Maintenance Services Fee {B}**	**Operations Monitoring Fee {C}**	**Other (Specify) {D}**	**Total Payments {E}={A}+{B}+{C}**
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
TOTAL					

Notes: Operations Monitoring Fee equals 1.5% of Gross Annual Energy Cost Savings.

Payment Schedule and Termination Value

Year	Termination Value	Total Payments From Above	Payment Number		Payment Number		Payment Number		Payment Number	
			Date	Amount	Date	Amount	Date	Amount	Date	Amount
1										
2										
3										
4										
5										
6										
7										
7										
9										
10										
TOTAL										

Notes: Enter the date and amount of each payment. Show additional payments on another sheet if necessary.
"Termination Value" is the lump sum payment required to buy out of the contract and receive title to all equipment in each year. If this option is not proposed in any year(s), indicate by "NA."

Energy Study Report Acceptance Form

The undersigned hereby on the content and form of the Energy Study Report and such Report shall be a part of the sample Contract as though full set forth herein.

IN WITNESS WHEREOF, the parties have executed this Form, the _____day of _____, 19___.

Facility Owner

By _____

Title _____

Contractor

By _____

Title _____

Approved and Recommended for Execution

_____

_____

Attachment C

Sample Energy Performance Contract

Performance Contract for Energy Efficiency Services

THIS CONTRACT, made as of the _____ day of _____, 19___, by and between the **School District** , hereinafter referred to as the "**Facility Owner**," acting by and through its **Director, Procurement Office**, and _____ a _____corporation having its principal offices at _____ hereinafter referred to as the "Contractor,"

WITNESSETH THAT:

WHEREAS, the **Facility Owner** owns or leases the Facility;

WHEREAS, Contractor provides certain services and equipment to reduce energy consumption in buildings;

WHEREAS, Contractor has submitted a written proposal in response to the **Facility Owner**'s request and has been selected by the **Facility Owner** as the most qualified Proposer for the work herein described;

NOW THEREFORE, in consideration of the mutual promises hereinafter set forth, the parties agree as follows:

Article 1 -- Definition

Key terms used within this contract are defined as follows:

Energy Baseline - The energy baseline is a calculation of each type of energy that would have been consumed in existing facilities, if Contractor had not installed proposed energy conservation measures. For purposes of this contract, electrical demand, measured in kilowatts (kW) will be considered a type of energy.

Energy Efficiency Measure (EEM) - An EEM is the installation of new equipment, modification or alteration of existing **Facility Owner** equipment/facilities, or revised operations and maintenance procedures to reduce energy consumption.

Energy Savings - Energy savings is a reduction of energy consumption or electrical demand resulting from the Contractor's energy efficiency measures. Energy savings shall be determined by comparing the energy baseline with the energy consumed (or demand) after Contractor has implemented energy efficiency measures.

Substantial Completion Date - The date on which the Contractor warrants by written notice that the EEMs are substantially complete and are producing savings equal to or greater than the Guaranteed Savings.

Termination Value - The amount the **Facility Owner** may pay to Contractor after the first anniversary of Substantial Completion Date to terminate this agreement for convenience. This amount shall be the total price shown in Article 5.2b, less any payments already made.

Article 2 -- Contract Documents

2.1 Documents Included. It is understood and agreed that the following documents, and any amendments or addenda thereto, comprise this Contract and are as fully a part of this Contract as though attached hereto or set forth at length herein: (1) General Terms and Conditions for Goods and Services dated _____ ___ (attached as Appendix 1); (2) Request for Proposal No. _____,including the offer, General Provisions, and specifications contained therein, and (3) the Energy Study Report to be executed by Contractor and the **Facility Owner** (attached as Appendix 2).

2.2 Entire Agreement. This Contract is the entire agreement between the parties, and no alterations, changes, or additions thereto shall be made, except in writing approved by the parties.

Article 3 -- Contractor's Services

3.1 Equipment Design and Construction

a. Within thirty (30) days of the execution of this Contract, Contractor shall commence designing and obtaining EEMs. Contractor shall prepare and submit EEM installation plans to the **Facility Owner** for review and approval prior to beginning EEM installation. Installation plans shall be certified by an engineer registered in the State of South Carolina to assure compliance with applicable building codes. Such certification shall be at the Contractor's sole expense.

b. The Contractor shall be responsible for quality control during the installation of all EEMs. Contractor shall inspect and test all work performed to insure compliance with Contract requirements. Contractor shall maintain records of inspections and tests, including any conducted by or for a utility or other regulatory agencies.

c. Contractor shall complete EEM installation by the date specified in Contractor's Energy Study Report.

3.2 Notice of Completion

a. The Contractor shall notify the **Facility Owner** in writing when the EEMs are installed and substantially complete by submitting a Notice of Substantial Completion and a written request for inspection. The request shall identify the total construction cost (including change orders), location, description of EEMs, planned testing of EEMs to verify performance, and recommended dates for inspection. Whenever possible, both **Facility Owner** and Contractor representatives will simultaneously inspect EEMs to facilitate mutual agreement on satisfactory Contract performance. The **Facility Owner** shall provide written notification to Contractor of the scheduled date and time for **Facility Owner** inspection within ten (10) days of receipt of inspection request. Following satisfactory inspection, the **Facility Owner** shall issue a Certificate of Substantial Completion.

3.3 Maintenance and Repair of EEMs

a. Contractor, at its sole expense, shall be responsible for maintenance and repair of all EEMs installed unless **Facility Owner** responsibility is expressly identified in the Energy Study Report and approved by the **Facility Owner**. Maintenance includes all work and costs associated with periodic inspections, tests, calibrations, and adjustments required to sustain and/or restore energy system operational status to as-designed performance and performance requirements of this contract. Repair includes all labor, material, and equipment required to replace, rebuild, or restore to as-designed performance systems and equipment that have failed.

3.4 Operation and Maintenance Manuals and Training

a. Contractor shall furnish operation and maintenance manuals and recommended spare parts lists for operations and maintenance of the Contractor-installed EEMs and modified **Facility Owner** equipment.

b. Within thirty (30) days of the installation completion, Contractor shall train **Facility Owner** personnel as required to operate, maintain, and repair EEM equipment and systems in the event of emergencies.

c. The Contractor shall train **Facility Owner** personnel or a designee to operate, maintain, and repair EEM equipment ninety (90) days prior to the end of the Contract term.

Article 4 -- Responsibilities of the **Facility Owner**

4.1 Reviews and Approvals

a. The **Facility Owner** shall review and reply to Contractor submitted materials (EEM installation plans) within thirty (30) days of receipt by the **Facility Owner** unless a different period is explicitly stated elsewhere in the Contract. If the materials are approved, the **Facility Owner** shall so indicate in writing. If the materials are not approved, the **Facility Owner** shall so indicate by written notice listing exceptions to the materials for correction by the Contractor.

4.2 Equipment Location and Access

a. The **Facility Owner** shall furnish mutually satisfactory rent-free space for the installation of the Contractor Equipment.

b. The **Facility Owner** shall grant the Contractor access to facility premises at such times as are requested by Contractor and acceptable to the **Facility Owner**, as needed to enable the Contractor to carry out its obligations under the Contract. The **Facility Owner** shall not unreasonably withhold approvals for Contractor access to the premises.

4.3 Operation and Maintenance of Equipment

a. The **Facility Owner** shall provide all necessary operation, maintenance, and repairs to the **Facility Owner's** pre-existing equipment provided the Contractor has identified its specific requirements for such procedures and provided training for **Facility Owner p**ersonnel as required in General Provisions 8.3 and 11.

Article 5 -- Compensation

5.1 Payments

a. Payment to Contractor shall begin the first calendar month after the Substantial Completion Date.

b. The **Facility Owner** shall pay Contractor an amount calculated as specified in the Payment Schedule attached in Appendix 2. Such payment shall continue until the **Facility Owner** has paid a total of _____ _____ ($_____.__) or for a period of _____ years from the Substantial Completion Date, whichever occurs first.

c. If the Contractor fails to achieve the Guaranteed Annual Cost savings specified in the Energy Study Report then the **Facility Owner** may, at its option, (1) recover the shortfall by deductions from the Contractor's future invoice(s), and/or (2) demand payment of the shortfall, in whole or in part, from the Contractor. Such payment shall be due to the **Facility Owner** within forty five (45) days of its demand.

Article 6 -- Term and Termination

6.1 Agreement Subject to Appropriation **(** Note: A funds disclaimer clause may not be required or applicable for some contracts. See South Carolina Code of Laws, Section 48-52-670 (A) **)**

a. Funds in this contract are payable from State and/or Federal appropriations. In the event sufficient appropriations are not made to pay the charges under the contract it shall terminate without any obligation to the School District.

6.2 Termination for Convenience

a. Any time after the first anniversary of Substantial Completion, the **Facility Owner** may exercise an option to terminate this contract by giving ninety (90) days notice and paying the Termination Value.

6.3 Contract Term

a. This Contract shall be in full force and effect from the date of the Notice to Proceed with Construction until _____ (_____) years after the Substantial Completion Date unless earlier terminated under Article 5.1b (Payments), Article 6.1a. (Agreement Subject to Appropriation), Article 6.2a. (Termination for Convenience) or for default.

IN WITNESS WHEREOF, the parties have executed this Contract the day and year first above written.

Facility Owner

By _____

Title _____

Contractor:_____

By _____

Title _____

STATE OF _____)

_____COUNTY OF _____)

On this _____day of _____, 19 ____, before me personally appeared

_____ and _____ to me personally known, who being by me duly sworn, did say that he/she/they is/are the

_____ of_____,
the Contractor named in the foregoing instrument, and that he/she/they is/are authorized to sign said instrument on behalf of the Contractor, and acknowledged that he/she/they executed said instrument as the free act and deed of the Contractor.

_____
Notary Public, State of

(Notary Seal)

_____

My commission expires:

_____

Appendix 1

General Provisions

1. Ownership of Contractor-Installed Equipment

1.1 All Equipment installed by the Contractor is and remains the property of the Contractor during the contract term.

1.2 At the expiration of the contract term, all right, title, and interest in and to all improvements and equipment constructed or installed on the premises and additions, shall vest in the **Facility Owner** at no additional cost free and clear of all and any liens and encumbrances created or caused by the Contractor. Contractor shall surrender possession of said premises and the improvements and equipment to the **Facility Owner** in good repair and condition, reasonable wear and tear excepted.

1.3 If the contract is terminated for convenience or for default, all right, title, and interest in and to all improvements, additions, or equipment of all EEMs installed by the Contractor to which the **Facility Owner** determines to take possession shall vest in the **Facility Owner**. For those EEMs for which the **Facility Owner** takes possession and thereby obtains title, the Contractor shall be compensated in accordance with General Provision 22 in case of default or Article 6.2 in case of termination for convenience by the **Facility Owner**.

2. Protection of Lienholder's Interest

2.1 The **Facility Owner** recognizes that project financing associated with Contractor performance on the contract may be accomplished using third party financing, and as such, may be secured by a security interest in this contract and the contractor equipment or facilities referred to herein. To protect any lienholder's interest, the Contractor may be required to assign to its lenders, some or all of its rights under this contract.

2.2 The **Facility Owner** will consider:

2.2.1 Requests for assignments of moneys due or to become due under the Contract, provided the assignment complies with State of South Carolina statutes;

2.2.2 Requests by lenders or lienholders for copies of any cure or show cause notice issued to Contractor;

2.2.3 Requests by lenders or lienholders for extension of response time to cure or show cause notices; and,

2.2.4 A proposed takeover of contract performance in the event the Contractor defaults in performance. Requests for takeover of the Contract on substantially the same terms and conditions will be approved if the proposed substitute party is acceptable to the **Facility Owner**.

3. Subcontracting

The Contractor shall not at any time subcontract, convey, transfer, or assign its obligations or services to be performed under this Contract, either in whole or in part, without the prior written consent of the Procurement Officer.

4. Responsibility for Contractor-Installed Equipment

The Contractor shall at all times during the term of the Contract have full ownership responsibilities of the Contractor-furnished systems and equipment. The Contractor may modify, replace, or change the systems and equipment during the Contract from that originally approved. However, any proposed modification, replacement, or change shall require notification and coordination with and approval of the Procurement Officer. Any such modification, replacement, or change of systems or equipment shall be performed by the Contractor at no cost to the **Facility Owner** and shall not interfere with **Facility Owner** operations.

5. Equipment Location and Access

5.1 The **Facility Owner** shall provide mutually satisfactory rent-free space for the installation and operation of the Contractor-furnished equipment and shall protect such equipment in the same careful manner that the **Facility Owner** protects its own property.

5.2 The **Facility Owner** shall provide access to the premises for Contractor and its subcontractors during regular business hours, or such other hours as may be requested by Contractor and acceptable to the **Facility Owner** to install, adjust, inspect, maintain, and repair the equipment. Contractor's access to correct any emergency condition shall not be restricted by the **Facility Owner**. The **Facility Owner** shall keep the area around the equipment reasonably clear so that the Contractor will have access to the equipment and so as not to limit or impair the ability of the Contractor to perform the services.

6. Installation of EEMs

6.1 EEM Installation Plans - The Contractor shall prepare and submit installation plans and specifications (the "Installation Plans") to the facility for review and approval before starting EEM installation. The Installation Plan shall include manufacturer's descriptive literature including performance and characteristics data and catalog cuts and shop drawings showing in detail the interface between EEM equipment and existing equipment and the location of EEM equipment on building floor plans. Installation Plans shall be certified by an engineer registered in the State of South Carolina to assure compliance with applicable building codes. Such certification shall be at Contractor's sole expense.

6.2 Notice to Proceed - A written notice from the Director of Procurement shall be issued, advising the Contractor of the date on which installation of EEMs shall proceed.

6.3 Work Schedule and Existing Operations. The Contractor shall contact the **Facility Owner** within ten (10) days after the **Facility Owner**'s issuance of the Notice to Proceed to submit a schedule of work and proposed sequence of work to the **Facility Owner** for approval. All work shall be scheduled with the **Facility Owner** at least fourteen (14) calendar days in advance. During the contract period, the existing buildings and grounds will be occupied by the **Facility Owner**. The Contractor shall perform all work with extreme care to avoid damage to existing construction and installations. The Contractor shall make all necessary provisions to keep interferences to a minimum as to the scheduling of work and storage of materials and shall confine its operations, materials, and equipment within the immediate vicinity of the new work. Contractor shall prearrange or schedule with the **Facility Owner** for all disruptive noise-producing construction activities so as not to unreasonably obstruct or interfere with any activities of the **Facility Owner**. The work shall be coordinated and planned in a manner that will permit operation of **Facility Owner** facilities without interruptions.

6.4 Materials and Workmanship - Unless otherwise specifically provided for in the Installation Plans, all equipment, materials and articles incorporated in the work covered by this contract are to be new and of the best grade of its respective kind for the purpose. All work to be executed shall be of the highest quality and performed by skilled mechanics in the best workmanlike manner. The **Facility Owner** may require the Contractor to dismiss from the job site such employee or employees as the **Facility Owner** deems incompetent, careless, insubordinate, or otherwise objectionable.

6.5 Superintendence - The Contractor shall provide a competent superintendent, satisfactory to the **Facility Owner**, on the work site at all times during progress of the work with authority to act for the Contractor. The Contractor shall also provide an adequate staff to coordinate and expedite its work properly and shall at all times maintain competent supervision of its work and that of its subcontractors to ensure compliance with contract requirements.

6.6 Inspection of Work

6.6.1 An inspector, designated by the **Facility Owner**, will make daily observation of the work at the site. The Contractor shall direct all inquiries, technical or administrative, to said inspector during construction.

6.6.2 All materials and workmanship shall be subject to inspection at any and all times during the period of installation. The **Facility Owner** has the right to reject defective material and workmanship. Rejected material shall be promptly removed from the job site and satisfactorily replaced. Rejected workmanship shall be satisfactorily corrected.

6.7. Removal of Debris and Cleanup - The Contractor shall, as directed during the progress of the work, remove and properly dispose of resultant dirt and debris and keep the premises reasonably clear. Before the work shall be considered completed, all equipment and unused materials provided for the work shall be removed and building and premises will be in a neat and broom-clean condition.

6.8 Protection of Persons and Property - Contractor shall provide adequate, clearly marked and/or lighted barricades or warning signs at all open trenches, excavation, and contract work areas for the protection of the work and safety of the public and students.

6.9 Protection of Property and Buildings - The Contractor shall take all necessary precautions during the progress of the work to protect the buildings as well as adjoining property, roadways, walkways, trees, lawns, landscape, and buildings from damage and injury and shall promptly repair any such damage to the satisfaction of the **Facility Owner**, at no cost to the **Facility Owner**.

6.10 Quality Control - The Contractor shall be responsible for quality control during installation of EEMs. The Contractor shall inspect and test all work performed during EEM installation to insure compliance with contract performance requirements. The contractor shall maintain records of inspections and tests, including inspections, and tests conducted by or for utility or other regulatory agencies.

6.11 Utilities

6.11.1 Water and Electricity - The Contractor will be allowed to use water and electricity for construction purposes without charge.

6.11.2 Interruption of Electrical Service - The Contractor will schedule interruption of electrical service so as to minimize such interruption to **Facility Owner** operations. Interruptions shall be permitted only on Saturday afternoons, Sundays and holidays. The Contractor shall notify the **Facility Owner**, in writing, at least fifteen (15) days in advance of any proposed interruption and shall obtain the approval of the **Facility Owner** prior to the interruption. Scheduled interruptions of electrical service shall not exceed twelve (12) hours.

6.11.3 Sanitary Facilities - If existing sanitary facilities of the **Facility Owner** are close to the contract work area, the Contractor is permitted to use same and shall maintain a sanitary condition at all times. If none is close by, Contractor shall install sanitary facilities at the job site and maintain same in a clean and sanitary condition for the use of the employees on the job site for the duration of the contract. The sanitary facilities shall conform to the requirements of the South Carolina Department of Health and Environmental Control.

6.12 Changed or Unusual Conditions - If an unexpected condition at the work site is encountered, the Contractor shall promptly, before disturbing the condition, notify the **Facility Owner**, in writing, of the subsurface, latent or unknown physical conditions of an unusual nature at the site differing materially from those encountered and generally recognized as inherent in the work of the character provided for in the contract; the **Facility Owner** shall promptly investigate the conditions, and if it finds such conditions do materially so differ and will cause an increase or decrease in the Contractor's costs of, or the time required for performance of the contract, the **Facility Owner** may, in its discretion, issue a Modification and modify the scope of existing contract with the Contractor, including such equitable adjustment as may be agreed upon between the parties. Or the **Facility Owner** may, in the alternative, negotiate with other Contractors to perform any additional work required by the changed or unusual conditions.

6.13 EEM Documentation - After installation completion and **Facility Owner** acceptance of the installed EEMs, the Contractor shall submit as-built drawings and operation and maintenance manuals, including recommended spare parts lists, to the Contracting Officer or its designated representative.

6.14 Manufacturers' Warranties - The Contractor shall use its best efforts to keep in effect all manufacturers' or other third party warranties relating to the Contractor-installed equipment and ensure that any benefits due to such warranties are passed on to the **Facility Owner** at the time the **Facility Owner** becomes the owner of the equipment.

7. Operation of EEMs

If new operations work is required for Contractor-installed EEMs, is similar to an existing operations work requirement for **Facility Owner**-owned equipment, and does not adversely affect **Facility Owner** resources, the Contractor may request the **Facility Owner** in its EEM description to perform operations work on Contractor-installed equipment. The **Facility Owner** reserves the right not to accept operations work on installed EEMs.

8. Maintenance of EEMs

8.1 Maintenance work includes periodic equipment inspection, tests, and calibrations, preventive maintenance tasks, and corrective actions required to sustain and restore energy system operational status to achieve all facility and energy conservation performance requirements of this contract.

8.2 Except as provided below, the Contractor shall be responsible for maintenance of all EEMs installed. Installed EEMs shall include all Contractor-installed equipment and those portions of **Facility Owner** equipment that have been modified or replaced to achieve proposed EEM performance.

8.2.1 If the maintenance work is similar to an existing maintenance work requirement (e.g., changing light bulbs) and does not adversely affect **Facility Owner** resources, the Contractor may request the **Facility Owner** to perform maintenance work on Contractor-installed equipment. If the **Facility Owner** accepts EEM maintenance responsibility, the **Facility Owner** reserves the right to provide the maintenance work in accordance with its own schedule.

8.2.2 The Contractor may propose to assume responsibility for maintenance on **Facility Owner** equipment in order to achieve proposed EEM performance. Any maintenance work provided by the Contractor on **Facility Owner** equipment shall be at the Contractor's expense. If the Contractor has taken over repair as well as maintenance of **Facility Owner** equipment as part of an approved EEM, that EEM shall include a definition of repair responsibility.

8.3 The Energy Study Report, attached as Appendix 2, will identify the performance of Contractor EEMs that are dependent upon certain **Facility Owner** facilities, systems, or equipment. Such required maintenance practices will be performed by the **Facility Owner** provided that they are described in full in the Energy Study and the Contractor has provided any training needed to enable **Facility Owner** personnel to perform maintenance practices to Contractor's satisfaction. Contractor shall provide any such training at Contractor's sole expense.

8.4 The **Facility Owner** will not move, turn off, or otherwise change any Contractor-owned equipment without the consent of the Contractor, unless such action is in accordance with the maintenance procedures provided by the Contractor; or if it is necessary in an emergency to prevent loss of life, injury, or damage to property, or severe discomfort to facility occupants.

9. Damage to or Failure of Equipment

9.1 When Contractor-owned equipment fails or is damaged or destroyed, the Contractor shall be responsible for repairs. The **Facility Owner** will repair failed Contractor-owned equipment or reimburse the Contractor for such repairs, if the failure resulted from negligence or improper operation by **Facility Owner** personnel.

9.2 When **Facility Owner** equipment fails or is damaged or destroyed, the **Facility Owner** will be responsible for repairs within a reasonable time period. The Contractor shall provide repairs, at no expense to the **Facility Owner**, if the **Facility Owner** equipment failure is a result of actions on the part of the Contractor, including, but not limited to the use of any materials, equipment or workmanship which is inferior, defective, or not in accordance with the terms of this contract. The Contractor shall make repairs within a reasonable period of time, or the **Facility Owner** may repair or have the repairs made and charge the Contractor for such repair costs. If any such property cannot be satisfactorily repaired or restored, the Contractor shall replace it. If the Contractor elects to take over repair responsibilities of **Facility Owner** equipment as part of an EEM, the EEM shall include a listing of the types of repairs that will be the Contractor's responsibility.

10. Contractor Maintenance and Repair Response Time

10.1 The Contractor shall establish a point of contact (name and phone number) for use by the **Facility Owner** in providing response to Contractor equipment failures. Initial telephone response to repair call messages shall be within sixty (60) minutes. If a site visit is needed to repair equipment, repair personnel shall arrive on site within twenty-four hours of the initial telephone response for non-emergency repairs or within five hours for emergency repairs. Although normal Contractor access is during the hours of 8:00 a.m. to 4:00 p.m., the Contractor will have twenty four (24) hour per day access to the buildings for emergency work.

10.2 In the event that Contractor fails to respond as required above or in the event of an emergency, the **Facility Owner** may perform emergency repairs to Contractor-owned equipment. The Contractor shall hold the **Facility Owner** harmless in such cases where the Contractor fails to respond and in emergencies.

11. Training for EEMs

11.1 Thirty (30) days prior to the installation completion, the Contractor shall train **Facility Owner** personnel as required to operate, maintain, and repair EEM equipment and systems in the event of emergencies.

11.2 The Contractor shall train **Facility Owner** personnel to operate, maintain, and repair EEM equipment ninety (90) days prior to the end of the contract term or within ninety (90) days after notice by the **Facility Owner** in the event of early termination.

11.3 The training program described in 11.1 and 11.2 shall provide instruction on operation, troubleshooting, maintenance, and repair of EEMs. Training shall include both classroom and hands-on instruction. Course materials shall include Contractor-supplied operation and maintenance plans and manufacturer-supplied manuals. The program shall be conducted at the facilities where the EEMs are located.

12. Grounds

Parking on lawns, walkways, and other landscaped/developed areas are strictly prohibited without prior approval. Where special permission is granted for these areas, Contractors shall be responsible for any damages and must return these areas to their full original condition as determined by the **Facility Owner**.

13. **Facility Owner** Projects

There shall be no restriction on **Facility Owner** projects of any kind including those that may provide energy conservation equipment, the removal of existing energy consuming equipment, or the addition of new energy consuming equipment for facility mission needs.

14. Utility Rebates

The implementation of an EEM may result in the **Facility Owner** being eligible for a rebate from the serving utility company. The Contractor shall be responsible for preparing any and all documentation required to apply for the rebate. The Contractor shall submit the rebate application and documentation to the **Facility Owner** for submission to the serving utility. Utility rebates can be applied to the capital cost of the project.

15. Deleted

16. Standards of Service and Comfort

The following facility performance requirements must be maintained throughout the Contract term.

16.1 In conditioned areas, space temperatures between 70°F and 76°F dry bulb, and 30-70% relative humidity shall be maintained during periods scheduled for occupancy.

16.2 During unoccupied periods, the cooling system may be turned off. However, the system must be so designed that before any high temperatures or humidity conditions that could damage equipment in the spaces can occur, the cooling system will restart and control the temperature or humidity as required. In any case, temperatures must be restored to the 70°F -- 76°F range by the start of the next occupied period.

16.3 Outside air cannot be reduced below the quantities found in ASHRAE Standard 90, "Ventilation for Acceptable Indoor Air Quality."

16.4 Minimum lighting levels shall be in accordance with applicable IES standards for each space (as of the time of EEM installation).

17. Material Changes and Baseline Modifications

17.1 The Energy Baseline may change if the facility undergoes changes in operating hours, occupancy, energy consuming equipment, or structure. Any change in operating hours, occupancy, energy consuming equipment, or structure that may reasonably be expected to change the energy consumption of the facility by more than ten percent (10%) of the total energy savings proposed by Contractor shall be considered a material change.

17.2 The **Facility Owner** shall notify the Contractor of any change in the facility's equipment or operating conditions that can reasonably be expected to constitute a material change within thirty (30) days of the time that the change becomes known to the **Facility Owner**. If the notice is not timely made, the modifications allowed in Article 17.3 immediately below shall be retroactive to the time the change commenced.

17.3 In the event of a material change the Energy Baseline shall be modified by mutual consent of the **Facility Owner** and the Contractor. Each party shall bear its own costs in this modification.

18. Insurance

18.1 Contractor shall maintain insurance acceptable to the **Facility Owner** in full force and effect throughout the term of this contract. The policy or policies of insurance maintained by the Contractor shall provide Combined Single Limit Coverage (bodily injury and property damage) in the amount of $1,000,000 per occurrence.

18.1.1 Insurance shall be in force the first day of the term of this contract.

18.1.2 Each insurance policy required by this contract shall contain the following three clauses:

a. "This insurance shall not be canceled, limited in scope of coverage or non-renewed until after thirty (30) days written notice has been given to the **Facility Owner**."

b. "It is agreed that any insurance maintained by the **Facility Owner** will apply in excess of, and not contribute with, insurance provided by this policy."

c. "The **Facility Owner** is added as an insured as respects operations performed for the **Facility Owner**."

18.2 Contractor agrees to deposit with the **Facility Owner**, on or before the effective date of this contract, certificates of insurance necessary to satisfy the **Facility Owner** that the insurance provisions of this contract have been complied with and to keep such insurance in effect and the certificates therefor on deposit with the **Facility Owner** during the entire term of this contract.

18.3 The **Facility Owner** shall retain the right at any time to review the coverage, form, and amount of the insurance required hereby. If, in the opinion of the **Facility Owner**, the insurance provisions in this contract do not provide adequate protection for the **Facility Owner**, the **Facility Owner** may require the Contractor to obtain insurance sufficient in coverage, form, and amount to provide adequate protection. The **Facility Owner** 's requirements shall be reasonable but shall be designed to assure protection from and against the kind and extent of the risks that exist at the time a change in insurance is required.

18.4 The **Facility Owner** shall notify the Contractor in writing of changes in the insurance requirements; and if the Contractor does not deposit copies of acceptable insurance policies with the **Facility Owner** incorporating such changes within sixty (60) days of receipt of such notice, this contract shall be in default and the **Facility Owner** shall be entitled to all legal remedies.

18.5 The procuring of such required policy or policies of insurance shall not be construed to limit the Contractor's liability hereunder nor to fulfill the indemnification provisions and requirements of this contract. Notwithstanding said policy or policies of insurance, the Contractor shall be obligated for the full and total amount of any damage, injury, or loss caused by negligence or neglect connected with this contract.

18.6 The Contractor shall take out a policy of builder's risk insurance in the amount equivalent to the contract amount, with the **Facility Owner** named as a loss payee under each policy, covering all work, labor, and materials furnished by such Contractor and its subcontractors against loss by fire, windstorm, lighting, explosion and other perils covered by the Extended Coverage Endorsement, and vandalism and malicious mischief.

18.6.1 The insurance policy shall contain the following:

1. "This insurance shall not be canceled, limited in scope of coverage, or nonrenewed until after thirty (30) days written notice has been given to the **Facility Owner."**

2. "All rights of subrogation are hereby waived against **Facility Owner,** its officers, employees, and agents."

3. A standard loss payee clause naming the **Facility Owner** as loss payee.

18.7 Contractor agrees to deposit with the **Facility Owner,** on or before the effective date of this contract, a certificate of insurance as evidence that such insurance provisions of this contract have been complied with and to keep such insurance in effect and the certificates thereof on deposit with the **Facility Owner** during the entire term of this contract.

18.8 Contractor shall maintain insurance coverage against the risk of loss, damage, or theft of contractor-owned and installed equipment until title to the equipment passes to the **Facility Owner** upon expiration of the contract.

19. Permits and Licenses

19.1 The Contractor shall procure all permits and licenses, pay all charges and fees, and give all notices necessary and incident to the due and lawful prosecution of the work.

19.2 At the time the **Facility Owner** determines to make award on the project, the Proposer shall possess a valid State of South Carolina contractor's license. If the Proposer is a joint venture, all parties to the joint venture must be individually licensed or the joint venture must be licensed. If the **Facility Owner** determines that the Proposer does not possess a valid license at the time of award, its proposal will not be considered.

20. Force Majeure

20.1 The term Force Majeure as used herein means unforeseeable causes beyond the reasonable control of and without the fault or negligence of the party claiming Force Majeure including acts of God, labor disputes, sudden actions of the elements, actions by federal, state, and municipal agencies, and actions of legislative, judicial, or regulatory agencies that conflict with the terms of this Contract.

20.2 If either party, due to Force Majeure, is unable to perform its obligations under this Contract, then that party shall be excused from whatever performance is affected by the Force Majeure, to the extent it is affected, except as to obligations to pay money, provided that:

20.2.1 The non-performing party, within fourteen (14) days after the commencement of the Force Majeure, gives the other party notice describing the particulars of the occurrence.

20.2.2 The suspension of the performance is of no greater scope and of no longer duration than is required by the Force Majeure.

20.2.3 The non-performing party uses its best efforts to remedy its inability to perform.

20.3 When the non-performing party is able to resume performance of its obligations under this Contract, that party shall give the other party notice to that effect within fifteen (15) calendar days of resumption of performance.

21. Events of Default

Each of the following events or conditions shall constitute a default by the Contractor:

21.1 The Contractor fails to produce the guaranteed energy savings in any consecutive twelve-month period during the term of the Contract and fails to pay the **Facility Owner** the guarantee payment as set forth in the Energy Study Report;

21.2 The standards of service and comfort set forth in the Contract are not provided due to failure of the Contractor to properly design, install, maintain, repair, or adjust the Contractor-furnished equipment, or failure to provide other services as described in the Proposal or Energy Study Report, providing that such failure continues for thirty (30) days after notice to the Contractor requesting that such failure to perform be remedied, or if a remedy cannot be effected in thirty (30) days, without a good faith effort by the Contractor to perform in that period and diligent subsequent performance;

21.3 Any intentionally false or misleading material representation or warranty furnished by the Contractor in connection with the proposal, the Energy Study Report or this Contract; and,

21.4 Any material failure by the Contractor to comply with the terms and conditions of this Contract, including breach of any covenant contained herein, providing that such failure continues for thirty (30) days after notice to the Contractor requesting that such failure to perform be remedied, or if a remedy cannot be effected in such thirty (30) days, without a good faith effort by the Contractor to perform in that period and diligent subsequent performance.

22. Remedies Upon Default

Upon occurrence of a default by the Contractor, the **Facility Owner** may, without an election of remedies:

22.1 Exercise all remedies available at law or at equity including bringing action for recovery of amounts due to the **Facility Owner** for damages and/or specific performance;

22.2 Exercise its option to terminate the Contract by paying seventy percent (70%) of the termination value to the Contractor, without the otherwise required ninety (90) day notice; and,

22.3 Without recourse to legal process, terminate this Contract by delivery of a notice declaring termination, whereupon the Contractor shall remove the Contractor-furnished equipment and reconnect and restore the **Facility Owner** 's original equipment, if available, or other **Facility Owner**-furnished equipment, to the conditions which existed prior to the inception of this Contract, normal wear and tear excepted.

23. Representations and Warranties

Each party warrants and represents to the other that:

23.1 It has all requisite power, authority, licenses, permits, and franchises, corporate or otherwise, necessary to execute and deliver this Contract and to perform its obligations;

23.2 Its execution, delivery, and performance of this Contract has been duly authorized by, and is in accordance with, its organic instruments, and this Contract has been duly executed and delivered for it by the signatories and constitutes its legal, valid and binding obligation;

23.3 Its execution, delivery, and performance of this Contract will not result in a breach or violation of or constitute a default under any agreement, lease, or instrument to which it is a party or by which it or its properties may be bound to be affected; and,

23.4 It has received no notice, nor to the best of its knowledge is there pending or threatened any notice, decree, award, permit, or order that would materially adversely affect its ability to perform hereunder.

24. Choice of Law

This Contract shall be interpreted, construed, and enforced in all respects in accordance with the laws of the State of South Carolina and any litigation arising therefrom shall be brought and resolved by its courts located in Columbia, South Carolina.

25. Laws to be Observed

The Contractor at all times shall observe and comply with all Federal, State, and local laws or ordinances, rules, and regulations which in any manner affect those engaged or employed in the work, the materials used in the work, and the conduct of the work. The Contractor shall also comply with all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the work. Any reference to such laws, ordinances, rules, and regulations shall include any amendments thereto.

26. Disputes

Any controversy or claim arising out of or related to the Contract will be settled in accordance with the procedures prescribed in the School District Procurement Code.

27. Notices

All notices to be given by either party to the other shall be in writing and must be either delivered personally or by overnight courier service or mailed by registered or certified mail, return receipt requested, addressed as follows:

To the **Facility Owner:**

Facility Owner
Procurement Office
1101 Barnes Street - Suite 601
Columbia, South Carolina 29201

To the Contractor:

_____
_____
_____
_____

28. No Waiver

None of the provisions of this Contract shall be considered waived by either party, except when such waiver is given in writing. The failure of any party, at any time or times, to enforce any right or obligation, with respect to any matter arising in connection with this Contract, shall not constitute a waiver as to future enforcement of that right or obligation of this Contract.

29. Tax Clearance

29.1 Final payment for the settlement of the contract will not be made by the **Facility Owner** until the Contractor has submitted to the **Facility Owner** a Department of Taxation clearance certifying that all delinquent taxes levied or accrued under State statutes against the Contractor have been paid.

29.2 To obtain such tax clearance, the Contractor, particularly an out-of-state contractor who does not possess a South Carolina I.D. number for General Excise Tax License, must obtain a South Carolina General Excise Tax License and pay the taxes due. The Contractor may apply for either a regular or a one-time General Excise Tax License.

29.3 Tax license and tax clearance applications may be obtained by telephoning (803) 737-5000 or submitting a request to the following address:

State of South Carolina
Department of Revenue
301 Gervais Street
Columbia, South Carolina 29201

30. Supplemental Agreement

This contract may be modified by a Supplemental Agreement executed by the Contractor and the **Facility Owner**.

31. Indemnification

31.1 Contractor shall indemnify, defend, and hold harmless the **Facility Owner**, and their officers, employees, agents, or any person acting on their behalf from and against: 1) any claim or demand for loss, liability, or damage, including, but not limited to claims for property damage, personal injury or death, by whomsoever brought, arising

from any accident or incident connected with the performance of this contract except liability arising out of the sole negligence of **Facility Owner** or its employees; (2) all claims, suits and damages by whomsoever brought or made by reason of the nonobservance or nonperformance of any of the terms, covenants and conditions herein or the rules, regulations, ordinances and laws of the federal, state, municipal, or country governments. Furthermore, Contractor shall reimburse **Facility Owner,** and their officers, employees, agents, or any person acting on their behalf for all attorney's fees, costs, and expenses incurred in connection with the defense of any such claims.

31.2 The Contractor shall be required to and shall hold the **Facility Owner** and its duly authorized representatives harmless against all demands, claims, actions, or liabilities arising from the use of any article, process or appliance covered by letters, patents or copyrights used in connection with the contract. Any royalties due or becoming due for use of the article or process shall be paid by the Contractor and shall be deemed to be included within the bid amount and contract price.

31.2.1 The Contractor shall defend, at its own expense, any action brought against the **Facility Owner**, to the extent that it is based on a claim of infringement and the Contractor will pay those costs and damages finally awarded against the **Facility Owner** in any such action which are attributable to any such claim, but such defense and payments are conditioned by the following:

1) That the Contractor shall be notified properly, in writing, by the **Facility Owner** of any notice of such claim;

2) That the Contractor shall have sole control of the defense of any action on such claim and all negotiations for its settlement or compromise; and,

3) Should the article, process or appliance become, or in the Contractor's opinion be likely to become, the subject of a claim of infringement, that the **Facility Owner** shall permit the Contractor, at its own expense, either to procure for the **Facility Owner** the right of continued use, or replace or modify the same so that they become noninfringing, or remove the article or appliance or discontinue the process.

32. Payroll Requirements **(** Note: If required by Facility Owner **)**

32.1 The following shall be complied with by the Contractor, Subcontractor, and others who are connected with this job.

32.2 Payroll records for all laborers and mechanics working at the site of the work shall be maintained by the General Contractor and its Subcontractors, if any, during the course of the work and preserved for a period of three (3) years thereafter. Such records shall contain the name and address of each employee, the employee's correct classification, rate of pay, daily and weekly number of hours worked, deductions made and actual wages paid. Such records shall be made available for inspection by the **Facility Owner** or any authorized representative thereof who may also interview employees during working hours on the job.

32.3 A certified copy of all payrolls shall be submitted weekly to the **Facility Owner**. The General Contractor shall be responsible for the submission of certified copies of the payrolls of all Subcontractors. The certification shall affirm that the payrolls are correct and complete, that the wages rates contained therein are not less than the applicable rates contained in the wage determination decision, attached to this contract, and that the classification set forth for each laborer or mechanic conforms with the work performed by the laborer or mechanic.

32.4 The Contractor or Subcontractor shall pay all mechanics and laborers employed on the job site unconditionally and not less often than once a week, and without deduction or rebate on any account, except as allowed by law, the full amounts of their wages including overtime, accrued to not more than five working days prior to the time of payment regardless of any contractual relationship that may be alleged to exist between the Contractor or Subcontractor and laborers and mechanics.

32.5 The **Facility Owner** may withhold from the Contractor so much of the accrued payment as may be necessary to pay the laborers and mechanics the difference between the wages required by the contract and the wages received by such laborers and mechanics.